TOWN OF DUXBURY

RADIOLOGICAL EMERGENCY RESPONSE PLAN

FOR PILGRIM NUCLEAR POWER STATION

Reviewed by: _____ 11/15/11
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TOWN OF DUXBURY

RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP)

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DEFINITIONS

Term	Definition
Access Control	All activities accomplished for the purpose of controlling entry or re-entry into a restricted zone because of radiological contamination to minimize the radiation exposure of individuals. This function is needed to prevent the general public from entering the restricted areas (sheltered and/or evacuated) and permitting only emergency workers with essential missions and limited members of the general public to enter a restricted zone.
Access Control Point	A point established at a road leading into a restricted zone for the purpose of controlling entry into the area.
Accident	An unforeseen and unintentional event that may result in an emergency.
Accident Assessment	The evaluation of the actual and potential consequences of a radiological incident.
ALERT	Events are in process or have occurred which involve an actual or potential substantial degradation in the level of plant safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels
Background Radiation	The level of naturally occurring radiation in the environment. Sources include air, water, soil, potassium-40 in the body and cosmic radiation from the sun. The usually quoted individual background radiation exposure in man's natural environment is an average of 125 millirem per year.
BECONS	The radio communications system for emergency notification and information is available for use by MEMA and towns within the Pilgrim ten-mile EPZ, and PNPS.
Contaminated, Injured or Exposed Individual	Individuals who are: (1) contaminated with radioactive material that cannot be removed by the simple methods described in NUREG-0654/FEMA REP-1, Criteria J.12. and K.5.b., (2) contaminated and otherwise physically injured, or (3) exposed to high levels of radiation.
Contamination (Radioactive)	A frequently misunderstood term, contamination refers to radioactive materials not in their intended containers. "Fixed" or "loose" contamination depends on the degree of effort required to unfix or remove the contamination from a surface.
Critical Organ	The body organ receiving a radiation dose that results in the greatest overall damage to the body.
Critical Pathway	The route or pathway that is given primary consideration as being the mechanism of principal radiation exposure to the public under given conditions.

Term	Definition
Curie	The basic unit 1 to describe the intensity of radioactivity in a sample of material. One curie is equal to 37 billion disintegrations (nuclear transformations) per second. So, in one curie, 37 billion atoms decay in one second. Several commonly used fractions of the curie include: Millicurie: 1/1,000th of a curie, (one-thousandth of a curie, abbreviated mCi) Microcurie: 1/1,000,000 of a curie, (one-millionth of a curie, abbreviated uCi) Nanocurie: 1/1,000,000,000 of a curie, (one billionth of a curie) Picocurie: 1/1,000,000,000,000 of a curie (one-trillionth of a curie, abbreviated pCi)
Decontamination	The process of making any person, object, or area safe by absorbing, destroying, neutralizing, making harmless, or removing chemical or biological agents, or by removing radioactive material clinging to or around it.
Derived Intervention Levels (DIL)	Equals a Protective Action Guide divided by the fraction of the diet assumed to be contaminated times the amount of food intake consumed in a year times a value that converts the activity in the food to the dose commitment in humans.
Design Basis Accident	The postulated accident that a nuclear power plant is designed to withstand or mitigate so as to meet U.S. Nuclear Regulatory Commission regulatory requirements.
DNN	The Dedicated Notification Network is a dedicated ringdown telephone and telefax used as a notification and information link between the Pilgrim Nuclear Power Station Control Room, State Police Troop D, MEMA Headquarters and Region II, the Pilgrim EPZ towns and host communities.
Dose	The quantity of energy absorbed from ionization per unit mass of tissue. The rad is the unit of absorbed dose.
Dose Commitment	The total radiation dose equivalent received by an exposed individual or to the critical (target) organ over the lifetime from a single event.
Dose Rate	The radiation dose delivered per unit time and measured, for instance rems per hour (as rads per second or rads per hour).
Dosimeter	A portable device such as a Dosimetry Life Record (DLR) film badge or direct reading ionization chamber for measuring and registering the total accumulated exposure to ionizing radiation.
Dosimetry	The measurement of radiation doses. It applies to both the devices used (dosimeters) and to the techniques.
Drill	An event involving organizational responses to a simulated accident to develop, test, and monitor specialized emergency skills that constitute one or more components of an emergency plan and procedure.

Term	Definition
Emergency	An unexpected event during the operation of a nuclear facility that has a significant effect on the safety of the facility, personnel or the public.
Emergency Action Levels	Specific instrument readings, system or event observations and/or radiological levels that initiate event classifications/notification procedures, protective actions, and/or the mobilization of an emergency response organization. These are specific threshold readings or observations indicating system failures or abnormalities.
Emergency Alert System (EAS)	A system of radio and television stations responsible for providing official government instructions to the public (formerly the Emergency Broadcast System – EBS).
Emergency Classification Level(s) (ECL):	Applies to commercial nuclear power plants only: **Unusual Event (UE)**: Events are in process or have occurred which indicate a potential degradation in the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs **Alert (ALERT)**: Events are in process or have occurred which involve an actual or potential substantial degradation in the level of plant safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels **Site Area Emergency (SAE)**: Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) that prevent effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary **General Emergency (GE)**: Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

Term	Definition
Emergency Medical Services	The supportive action that entails the provision of medical treatment and ambulance services to the critically ill and injured.
Emergency Medical Services (Office of)	The Massachusetts Department of Public Health Office of Emergency Medical Services maintains information and communication links with ambulances and medical resources throughout Massachusetts, New Hampshire, Vermont, Connecticut, and Rhode Island.
Emergency Operating Center (EOC)	A facility that is the primary base of emergency operations for an off-site response organizations (ORO) in an emergency.
Emergency Operations Facility (EOF)	A facility that is the primary base of emergency operations for and operated by the licensee in a radiological incident where there is a coordinated deployment of emergency personnel, evaluation of offsite effects of the accident, coordination of decisions affecting accident mitigation and public safety, and maintenance of communication with offsite authorities.
Emergency Planning Zone (EPZ)	A geographic area surrounding a commercial nuclear power plant for which emergency planning is needed to ensure that prompt and effective actions can be taken by State and local governments to protect the public health and safety in the event of a radiological accident. The plume pathway EPZ is approximately 10 miles in radius, while the ingestion pathway EPZ has a radius of approximately 50 miles.
Emergency Response Organizations	The Federal, State, or local agencies or departments or executive offices and nuclear utilities that have a major or lead role in emergency planning and preparedness.
Emergency Worker Monitoring and Decontamination Station	The designated area within a monitoring station where emergency workers, equipment, and vehicles are monitored for radiological contamination and decontaminated, if necessary.
Evacuation	A population protection strategy involving orderly movement of people away from an actual or potential hazard, and providing reception centers for those without their own resources for temporary relocation.
Exercise	An event involving organizational responses to a simulated commercial nuclear power plant accident with radiological and other offsite consequences. The purpose of an exercise is to test the integrated capabilities of involved offsite response organizations to implement emergency functions set forth in State, Tribal, and local radiological emergency response plans and procedures.
Exposure	The absorption of radiation or ingestion of a radionuclide. Acute exposure is generally accepted to be a large exposure received over a short period of time. Chronic exposure is exposure received during a lifetime.
Exposure Limits	Established limits for administratively controlling exposures to radiation.

Term	Definition
Food, Water, and Milk Control	The protective action that entails controlling food, water, milk, and livestock feed supplies, which may have become contaminated.
GENERAL EMERGENCY	Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.
Hostile Action	An act toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devises used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the nuclear power plant. Non-terrorism-based EALs should be used to address such activities (e.g., violent acts between individuals in the owner controlled area).
Host Community (Area)	A geographical area that is at least 5 miles, and preferably 10 miles, beyond the boundaries of the 10-mile plume pathway EPZ (15 – 20 miles from the commercial nuclear power plant) where functions such as congregate care, radiological monitoring, decontamination, and registration are conducted.
Incident Command System (ICS)	ICS is a standardized on-scene incident management concept designed specifically to all responders to adopt and integrated organizational structure without being hindered by jurisdictional boundaries.
Joint Information Center (JIC)	A central point of contact for all news media at the scene of the incident. News media representatives are kept informed of activities and events via public information officials from all participating Federal, State, and local agencies, which, ideally, are collocated at the JIC.
Ingestion Exposure Pathway	The pathway by which the exposure could be from ingestion of contaminated water or foods, such as milk, meat, or fresh vegetables.
Ingestion Zone	The emergency planning zone corresponding to the ingestion exposure pathway, having a radius of about 50 miles for commercial nuclear facilities.
KI Dispensing Site (KIDS)	Sites that are set up by MDPH to dispense KI (Potassium Iodide) to the evacuating general public.

Term	Definition
Law Enforcement	The supportive action that entails the use of law enforcement personnel to maintain civil order
Letters of Agreement	Agreements in writing between two or more organizations, groups, or individuals that stipulate the resources and actions expected and to be provided in response to an emergency request.
Mass Care	The supportive action that entails the provision of food, shelter, routine medical services, registration, and other essential provisions or services for evacuees.
Mass Care Shelter	A facility at least 5 miles beyond the 10-mile EPZ boundary designated to provide food, lodging, and care to members of the public evacuated from the EPZ as the result of an emergency.
Mobility Impaired	Those without transportation, including those without their own cars, those who are unable to drive and those who need assistance, any of whom will need transportation assistance to evacuate.
Monitoring	The act of detecting the presence of radiation and the measurement of radiation levels, usually with a portable survey instrument.
MS-1 Hospital	Hospitals trained and capable of treating members of the general public who may be injured and/or considered to have substantial radiation related injuries, or who may have been exposed to and contaminated by radioactive materials.
National Response Plan (NRP)	The National Response Plan specifies how the resources of the federal government will work in concert with state, local, and tribal governments and the private sector in response to Incidents of National Significance.
National Incident Management System (NIMS)	NIMS is a structure for management of large-scale or multi-jurisdictional incidents.
Nuclear Alert System (NAS)	A communications network which links the State police communications centers, the State's emergency management agencies, the near-site facilities, the Vermont Yankee and Seabrook Power Stations' control rooms and the emergency operations facility for the affected power station.
Nuclear Power Station	A site where nuclear materials are employed in commercial power generating operations.
Offsite	The area beyond the boundaries of a nuclear plant.
Onsite	The area/location of the commercial nuclear plant.
Permanent Resident Population	All members of the public who have a residence in the 10-mile EPZ but are not in institutions.

Term	Definition
Plume	Generally a gaseous atmospheric release from a nuclear power plant, in an accident or emergency, which may contain radioactive noble gases and volatile solids. While emergency plans must recognize the very low probability that particulates could be released in a serious accident, primary emphasis is given to the development of protective actions against the release of noble gases and volatiles such as radioiodines. This cloud is not visible to the eye, but can be measured, or "seen" with radiation measurement equipment.
Plume Exposure Pathway	For planning purposes, the area within approximately a 10-mile radius of a nuclear plant site. A term describing the means by which whole body radiation exposures occur as a result of immersion in a plume release. The area in which plume exposures are likely is described in NUREG- 0396 as an area extending out approximately 10 miles from the reactor site and forming roughly a "keyhole" shape, with the keyhole oriented downwind. In the EPZ-plume, actions may be required to protect the public from the effects of whole-body external exposure to gamma radiation from the plume and from deposited materials and inhalation exposure from the passing radioactive plume's released materials. The duration of exposure in this mode could range from hours to days in the case of particulate deposition.
Plume Zone	The emergency planning zone corresponding to the plume exposure pathway having a radius of about 10 miles for commercial nuclear facilities.
Potassium Iodide (KI)	A prophylactic drug (stable form of iodine) that can be used effectively to block the uptake of radioiodine by the thyroid gland.
Precautionary Action	Those measures taken early in an emergency (at ALERT or SITE AREA EMERGENCY) to provide additional time for implementation, to reduce the number of transients in an EPZ, and to ease traffic congestion later if a full-scale evacuation is ordered. Precautionary actions include transfer of daycare and school children to host facilities outside the EPZ, and closing of state forests, parks, beaches, and other outdoor recreation areas. It may include sheltering of school children during a security event.
Primary Agency	The governmental department or subdivision that is assigned fundamental and lead responsibility to ensure the fulfillment of a designated function.
Projected Dose	The estimated or calculated amount of radiation dose to an individual from exposure to the plume and/or deposited materials, over a period of time, in the absence of protective action.
Protective Actions	Those measures taken in anticipation of or after an uncontrolled release of radioactive material has occurred to prevent or mitigate radiological exposures to persons that would be likely to occur if the actions were not taken. Protective actions include evacuation, sheltering, access control, and food, water, and milk control.

Term	Definition
Protective Action Guides (PAGs)	Projected dose to an individual in the general population that warrants the implementation of protective action. Specific PAGs (FDA and EPA) have been recommended in terms of the level of projected dose that warrants the implementation of evacuation, sheltering, relocation, and limiting the use of contaminated food, water, or animal feed.
Protective Action Recommendations (PAR)	Advice to the State on emergency measures it should consider in determining action for the public to take to avoid or reduce their exposure to radiation.
Public	The general population with the exception of site personnel.
Public Alert and Notification System (PANS)	A network of sirens, EAS tone-alert radios, NOAA tone-alert radios, public address systems, mobile speakers, loud-hailers, and door-to-door personal notification that would be used to notify the public of an emergency.
Public Health and Sanitation	The supportive action that entails the provision of adequate health services and the maintenance of sanitation facilities and procedures.
Rad	Acronym for radiation absorbed dose. The basic unit of absorbed dose radiation. One rad represents the absorption of 100 ergs of nuclear (or ionizing) radiation per gram of the absorbing material or tissue
Radiation	Any or all of the following: alpha particles, beta particles, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other atomic particles.
Radiological Emergency Response Plan	A detailed plan which coordinates and describes the emergency response organizations, responsibilities, and capabilities of local or State governments and private organizations to ensure public health and safety arising from an emergency in which there is a potential for radiological release.
Radiological Exposure Control	The monitoring and controlling of public and emergency worker exposure, maintaining records of this exposure, and the actions and procedures necessary for the decontamination of evacuees, emergency workers, and equipment and materials.
Radiological Incident	Any event involving actual or potential radiation exposure or radioactive contamination to the public resulting from the release of radioactive materials from a nuclear power station.
Reception Center	A pre-designated facility outside the Plume Exposure EPZ (minimum is 15 miles from utility) at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to Congregate Care Centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. (Note: also called a relocation center, registration center.)

Term	Definition
Recovery	The process of reducing radiation exposure rates and concentrations of radioactive material in the environment to acceptable levels for return by the general public for unconditional occupancy or use after the emergency phase of a radiological emergency.
Re-entry	The provisions for the return of the public after evacuation, when the radiation risk has been reduced to acceptable levels.
Release of Radioactive Material	a. Controlled Release - Any release of radioactive material from a nuclear power station, which was planned and is being controlled by station personnel. b. Unplanned Release - Any release of radioactive material which is not a controlled release as defined above.
Relocation	The removal or continued exclusion of people (households) from contaminated areas to avoid chronic radiation exposure.
Rem	Acronym for Roentgen equivalent man. The unit of dose of any ionizing radiation that produces the same biological effect as a unit of absorbed dose of ordinary x-rays. A unit of dose for measuring the amount of ionizing radiation energy absorbed in biological tissue.
Restricted Zone	An area of controlled access from which the population has been evacuated, relocated or sheltered-in-place.
Return	Reoccupation of areas cleared for unrestricted residence or use by previously evacuated or relocated populations.
Roentgen	A unit of exposure of gamma (or X-ray) radiation in field dosimetry. One roentgen is essentially equal to one rad. A unit for measuring the amount of radiation energy imparted to a volume of air. The roentgen can be used only to measure X-rays or gamma rays.
Sampling	Collecting specimens of materials (e.g., particles or radioiodine in the air, animal feed, vegetation, water, soil, milk) at field locations.
Shelter-in-Place	A protective action which includes going indoors listening to an EAS radio or television station, closing all windows and doors, closing exterior vents, and turning off heating and air conditioning equipment using outside air.
SITE AREA EMERGENCY	Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) that prevent effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.
Source Term	The radioisotope inventory of the reactor core, or radioisotope release to the environment, often expressed as a function of time.

Term	Definition
Standard Operating Procedures	A detailed pre-established set of operational instructions, which direct an agency's action in response to an emergency situation. These procedures will be used by an agency in carrying out its assigned responsibilities.
Support Agency	The governmental department or subdivision that is assigned to assist in the fulfillment of a designated function.
Supportive Actions	Those actions that are planned or are taken during or after protective actions to ensure public health and welfare.
Thyroid Blocking	The use of potassium iodide or other suitable drug for the purpose of saturating the thyroid gland with stable iodine and thereby preventing thyroid uptake of radioiodine.
Total Population Exposure	The estimated exposure to all segments of the general public following a radiological release from all exposure pathways, including exposure from the plume, ingestion, and ground plume exposure pathways.
Transient Population	That segment of the public visiting areas inside the EPZ, where they do not reside, such as tourist, employees, etc.
UNUSUAL EVENT	Events are in process or have occurred which indicate a potential degradation in the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs

ACRONYMS

Acronyms	Meaning
ACP	Access Control Point
BECONS	Pilgrim Station's community notification system
DLR	Dosimetry Life Record
DNN	Dedicated Notification Network
DRD	Direct Reading Dosimeter
EAL	Emergency Action Level
EAS	Emergency Alert System
EMA	Emergency Management Agency
EMD	Emergency Management Director
EMS	Emergency Medical Services
EMT	Estimated Mobilization Time
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPZ	Emergency Planning Zone
ETE	Evacuation Time Estimate
FEMA	Federal Emergency Management Agency
KI	Potassium Iodide
MDPH	Massachusetts Department of Public Health
MDS	Monitoring and Decontamination Station
MEMA	Massachusetts Emergency Management Agency
NAWAS	National Warning System
NIAT	Nuclear Incident Advisory Team
NIMS	National Incident Management System
NRC	Nuclear Regulatory Commission
PADs	Protective Action Directive
PAGs	Protective Action Guidelines

ACRONYMS

Acronyms	Meaning
PARs	Protective Action Recommendations
PIO	Public Information Officer
PNPS	Pilgrim Nuclear Power Station
RACES/ARES	Radio Amateur Civil Emergency Services/Amateur Radio Emergency Service
RERP	Radiological Emergency Response Plan
REWMDS	Regional Emergency Worker Monitoring and Decontamination Station
RO	Radiological Officer
TTY	Teletypewriter for the Hearing Impaired

SECTION I - GENERAL

A. Background

1. The Pilgrim Nuclear Power Station (PNPS) is located in the Town of Plymouth in the Commonwealth of Massachusetts on the shore of Cape Cod Bay.

2. The Town of Duxbury is located approximately six miles northwest of the PNPS and entirely within the 10 mile EPZ. The 2011 Estimated Town Census is 15,439.

3. A hazard consideration for PNPS is the potential unplanned release of radioactive material resulting from an emergency at the plant. The probability of such a release is very low due to design and structural specifications required and enforced by the Nuclear Regulatory Commission (NRC) and redundant safety systems. The unplanned release of radiation from PNPS remains a possibility and therefore, appropriate plans to protect the public health and safety must be maintained.

4. Federal guidelines require emergency planning for the areas within approximately a 10-mile and a 50-mile radius of PNPS. These areas, referred to as Emergency Planning Zones (EPZ), are areas in which certain types of protective measures for the public may need to be taken in the event of a radioactive release. Areas in close proximity to PNPS are more likely to be affected by a release;

therefore, the 10-mile EPZ has been divided into sub-areas. The EPZ sub-area boundaries are based upon compass direction and distance radii from PNPS as well as geographical and political considerations.

5. Within the 10-mile EPZ, the exposure to the public may come from direct contact with deposited radioactive material, the radioactive plume or by intake of contaminated air, food and water. Exposure within the 50-mile EPZ may come from ingestion of contaminated food, water or milk. The majority of this plan is concerned with emergency planning and protective measures for the portion of the Town of Duxbury situated within the 10-mile EPZ.

6. The Town of Duxbury has a governmental system capable of handling emergency situations as a result of severe weather, hurricanes, and snow emergencies. This has been demonstrated through actual experience in evacuations during all seasons of the year, whereby governmental units support evacuation and have procedures in place for warning and evacuation assistance. This experience provides a realistic basis for adequate response to an emergency at PNPS.

B. Assumptions

1. A radiological emergency can arise from operations at PNPS, whether from a minor release of radioactive material contained within the PNPS site or a major release of material from the most serious design basis accident.

2. PNPS will comply with the prompt notification requirement.

3. PNPS will provide essential information to State agencies as to the magnitude of the release, areas affected, and any recommended protective actions.

4. Town governmental agencies will respond, as required, to fulfill their responsibilities in providing for public safety.

5. State agencies will respond to assist the Town of Duxbury and implement responsibilities assigned in the Massachusetts Comprehensive Emergency Management Plan, Appendix 2. (Radiological Emergency Response Plan).

C. <u>Scope</u>

1. This plan includes Town, State, and Federal agencies, and quasi-government and private volunteer organizations responsible for or capable of planning for and responding to an emergency at PNPS.

2. The plan designates responsibilities and the method of implementation for agencies to fulfill their response roles.

3. The plan describes the various protective actions to be taken in the event of an emergency at PNPS.

4. The plan was prepared to conform with requirements and guidelines established by the Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission (NRC) and is consistent with the Massachusetts Comprehensive Emergency Management Plan, Appendix 2. (Radiological Emergency Response Plan).

5. The Commonwealth has adopted the national Incident Management System (NIMS). Utilizing guidance from NIMs, the MARERP has incorporated standardized terminilogy and the Incident Command System (ICS), where applicable. The plan is supported by Standard Operating Procedure that include detailed instructions on when and how each of the response actions will be performed.

6. The Mass Notification System (MNS), personal protection equipment (PPE) and Duxbury message boards are protective responses exclusive to the town of Duxbury. The aforementioned protective responses are to be utilized and maintained solely by the town of Duxbury and Duxbury Emergency Management Agency.

D. Purpose

Preparation for coping with an emergency at PNPS necessitates a joint cooperative effort by Town, State, and Federal agencies, quasi-government and private volunteer organizations; and PNPS. This plan defines the role of the town of Duxbury and identifies the resources and interface that must exist among involved agencies at all levels. This plan is supported by Standard Operating Procedures (SOP's) which include detailed instructions on when and how each of the response actions are to be performed.

E. Concept of Operations

1. Direction and Control

The direction and control of off-site emergency activities in the Town of Duxbury is the responsibility of the Board of Selectmen.

(a) The Board of Selectmen will receive advice and support from the Emergency Management Director and other Emergency Operations Center (EOC) staff members

(b) The Emergency Management Director will coordinate response efforts with Town, State, and Federal agencies, and quasi-government and private volunteer organizations.

2. Notification

(a) In the event of an emergency at PNPS, the Public Safety Dispatch Center will be notified by the PNPS Operations Shift Manager.

(b) The Public Safety Dispatch Center at the 24-hour dispatch point will notify the Board of Selectmen, Emergency Management Director and other designated agencies/individuals as described in Section II, Part E of the plan. The Emergency Management Director will verify and ensure that Town agencies/individuals are notified.

(c) In the event of an emergency involving protective actions, the Board of Selectmen will ensure notification of the Town population.

3. Emergency Communications

Communications will be maintained among principal response organizations during an emergency at PNPS.

(a) BECONS, RACES, and commercial telephones will be used as the primary means of communications between the Town EOC and other EOC's. Local Emergency Response radio networks will serve as an alternate means of communications.

(b) The EOC Communications Officer will be responsible for activating and managing the Town EOC Communications Center used to support communications to and from EOC staff. The Communications Center has radio communications capabilities to include, Fire, Police, RACES, DPW, CB, Harbormaster, and BECONS.

4. Public Information

(a) Information will be provided to the public in an accurate and timely manner before, during and after an emergency at PNPS using public information materials and news statements disseminated from the Joint Information Center.

(b) Emergency public information materials will be produced and distributed to Town residents within the EPZ on an annual basis.

(c) The Town of Duxbury Public Information Officer (PIO) will coordinate with Federal, Town, State, and PNPS PIO's to provide information to the public. News statements will be disseminated from the Joint Information Center.

(d) Rumor Control telephone numbers will be activated in the EOC and publicized for informational purposes in the Public Information Calendar and through the Joint Information Center.

5. Emergency Facilities and Equipment

(a) The Town of Duxbury EOC located adjacent to the Central Fire Station will serve as the central location for coordination of Town response efforts during an emergency at PNPS.

(b) Radiological equipment, communications equipment and emergency supplies have been identified and are available to support the Town response.

6. Accident Assessment

Accident assessment is the primary function of the Massachusetts Department of Public Health (MDPH). The MDPH Nuclear Incident Advisory Team (NIAT) personnel will determine the consequences of any radiological release from PNPS based upon plant data and field monitoring results.

7. Protective Response

The State is responsible for deciding the protective action directives to be implemented. The Town is responsible for implementing the protective action selected. Protective actions will be based on recommendations from the Utility and State assessment teams, and other available sources of information.

(a) Sheltering may be directed when Plant, weather, or road conditions indicate that sheltering would be the appropriate action. The public will be instructed via Emergency Alert System (EAS) announcements to remain indoors with ventilation systems turned off and doors and windows closed.

(b) Evacuation may be directed when there is sufficient lead time before a release of radioactive materials. The public will be instructed via EAS announcement to travel out of the affected area using designated evacuation routes.

(c) Evacuees who report to the designated Reception Center shall be registered, monitored for contamination and decontaminated, as necessary.

8. Radiological Exposure Control

(a) Emergency workers will be provided with dosimetry and potassium iodide (KI) as directed by MDPH. Exposure records will be maintained for all emergency workers and doses will be reported to MDPH.

(b) Monitoring and decontamination of emergency workers, and equipment will be performed at the Regional Emergency Worker Monitoring and Decontamination Station (REWMDS) located at the Erwin K. Washburn Primary School, Carver, MA.

(c) School children and transient shelter population will have potassium iodide (KI) provided at school and shelters.

9. Relocation, Reentry and Return

(a) The Massachusetts Emergency Management Agency (MEMA) will terminate the emergency response effort based upon recommendations from MDPH and

Town EOC staff. Relocation, Reentry and Return efforts will be implemented to ensure a safe and orderly recovery phase.

(b) Following a determination that an area is safe for return, evacuees will be notified that they may return to the area.

(c) Limited access to all restricted zones may be permitted for essential duties. Re-entry will be coordinated between MDPH and the town officials.

F. Support Areas

1. Staff

Staff support will rest with each agency according to the personnel resources and capabilities of the agency. Arrangements for inter-agency support will be made through the Emergency Management Director.

2. Material

Material support will be provided by each agency as appropriate and necessary. Additional or unusual materials may be obtained through the Emergency Management Director.

I. FUNCTIONS

PART A - ASSIGNMENT OF RESPONSIBILITY

1. Purpose

a. This section identifies the organizations who will respond to a radiological emergency at the Pilgrim Nuclear Power Station (PNPS). It summarizes the individual responsibilities for specific emergency response functions and the basic organizational structure for the Town of Duxbury emergency response effort.

2. Authority

a. The Town of Duxbury is governed by Selectmen as provided by pertinent laws of the Commonwealth of Massachusetts and by the Duxbury Town Charter.

b. In accordance with State law, under the Massachusetts Civil Defense Act, M.G.L. Chapter 639, Acts of 1950, as amended, the Selectmen have appointed a local Emergency Management Director. The Board of Selectmen is responsible by law for the health and safety of persons and property, and exercises this authority during emergencies through the local Emergency Management Director. The Board of Selectmen has the authority to declare an emergency and to initiate extraordinary actions.

c. The Radiological Emergency Response Plan has been developed in accordance with local responsibilities of the Town of Duxbury under the Massachusetts Emergency Management Act, M.G.L. Chapter 639, Acts of 1950, as amended by chapter 33 Appendix, Section 13, and is consistent with the Massachusetts Comprehensive Emergency Management Plan (CEMP). It also conforms with existing Federal guidelines and criteria.

d. Due to the nature and potential magnitude of an emergency at PNPS, and the need for quick action on the part of local officials, implementation of protective response measures under this plan shall be taken on the basis of local intelligence and/or upon a directive from the Commonwealth through the Massachusetts Emergency Management Agency (MEMA) and State Police, Middleborough Troop D as described in this plan. Local authorities may consider it necessary to issue a Local Declaration of Emergency at this time under the provisions of State law. Elements of the Commonwealth's laws relating to a Local Declaration of Emergency initiating extraordinary action are contained in Section 31 of Chapter 34 and Section 19 of Chapter 40, and Section 31 of Chapter 44 of the General Laws of the Commonwealth of Massachusetts.

e. Private agencies have executed Letters of Agreement with both the Town and the State, defining their emergency responsibilities. Section III identifies Letters of Agreement for the Town of Duxbury. Agreements with bus companies, ambulance providers, and host health care facilities are in the MEMA Region II plan.

3. Succession of Authority

a. Succession of authority in the Town of Duxbury for a response to an emergency at PNPS is as follows:

(1) Chairman, Duxbury Board of Selectmen.

(2) Selectmen, in descending order of seniority.

(3) Town Manager

b. If conditions warrant immediate actions, as recommended by the Operations Shift Manager at PNPS, and none of the above are immediately available this plan may be initiated by:

(1) Emergency Management Director or his alternate

(2) First Shift Commander

(3) Police Chief

4. Primary Organizations

Selected Town, State and Federal agencies, private volunteer organizations, and the Utility are part of the overall response effort listed. Figure A-1 shows the Town of Duxbury emergency response organization. Figure A-2 illustrates the interrelationships of the Town, State, Federal and private emergency response organizations. Figure A-3 summarizes each department's/individual's primary, support and coordination functions. Figure A-4 summarizes the state's primary, support and coordination functions. The supervisory personnel of each department/agency is responsible for ensuring continuity of resources (technical, administrative and material). Each organization maintains the capability for 24-hour per day emergency response for a protracted period. Section II-H, Emergency Facilities and Equipment, describes resources available to support the emergency response with equipment and facilities.

a. Town

The Town organization is responsible for implementing and coordinating Town response to an emergency at PNPS. The key departments/individuals of the Town's emergency response organization are identified, along with their respective functions.

(1) Board of Selectmen

(a) Provide overall direction and control of the emergency response.

(b) Ensure coordination of the siren activation with Emergency Alert System (EAS).

(c) Issue a Local Declaration of Emergency.

(d) Develop news statements prior to Public Information Officer (PIO) mobilization.

(e) Approve all news statements.

(f) Ensure Town input to State on local conditions.

(g) Ensure implementation of protective actions directives.

(h) Directs Relocation, Reentry and Return activities.

(i) Regular review and approval of the Radiological Emergency Response Plan (RERP).

(2) <u>Emergency Management Agency</u>

(a) Receive emergency notifications from Public Safety Dispatch Center or Communications Officer via Dedicated Notification Network System (DNN).

(b) Ensure notification of key Town officials by Public Safety Dispatch Center.

(c) Ensure notification of EOC staff by Public Safety Dispatcher via Town of Duxbury Mass Notification System (MNS) with follow-up phone call as needed.

(d) Ensure twenty-four hour staffing of the EOC.

(e) Activate and manage the EOC.

(f) Coordinate and maintain emergency response operations.

(g) Assist EOC staff in resolving operational problems, if necessary.

(h) Conduct periodic EOC briefing on the status of the emergency.

(i) Obtain additional resources needed for response.

(j) Provide information to the State on local conditions.

(k) Recommend actions to the Board of Selectmen.

(l) Coordinate implementation of protective actions including distribution of KI to school children, shelters and emergency workers

(m) Distribute PPE as directed and supplied by Duxbury EMD.

(n) Coordinates Relocation, Reentry and Return operations.

(3) Police Department

(a) Provides security at the EOC.

(b) Provides EOC police communications support.

(c) Provides route alerting for recreational areas including Gurnet/Saquish, and Blakeman's beach if necessary and if possible.

(d) Provides back-up route alerting for siren failure.

(e) Coordinates traffic flow for evacuation and maintains roads in passable conditions.

(f) Recommends alternate evacuation routes.

(g) Controls access to restricted zones.

(h) Provides security for restricted zones.

(i) Provides traffic control at traffic and access control points.

(j) Assist with implementation of Relocation, Reentry and Return activities.

(4) Fire/EMT Department

(a) Receives emergency notification from Public Safety Dispatch Center and performs emergency notification of town officials.

(b) Conducts siren route alerting for siren failure, as necessary.

(c) Provides rescue and ambulance services.

(d) Provides fire protection.

(e) Assists with implementation of Relocation, Reentry and Return activities.

(f) Deploys Duxbury message boards.

(5) Department of Public Works

(a) Coordinate placement of traffic and access control equipment at traffic control points and recreational areas.

(b) Maintain evacuation routes in passable condition.

(c) Assists in establishing alternate evacuation routes as necessary.

(d) Provide impediment removal as required.

(e) Provide route alerting for siren failure if requested from Central Dispatch.

(f) Assists with implementation of Relocation, Reentry and Return activities.

(6) Harbormaster

(a) Provides emergency notification to boaters and persons upon tidal areas.

(b) Coordinate Route Alerting Response on Duxbury beach.

(c) Assist and coordinate in evacuation of beach and tidal areas.

(d) Assists in controlling access to marine areas.

(e) Coordinates response actions with U.S. Coast Guard and with other town Harbormasters.

(f) Assists in notification of Clark's Island beach areas.

(g) Assists and coordinate boaters in mooring and in disembarking of boats.

(h) Assists with implementation of Relocation, Reentry and Return activities.

(7) School Department

(a) Notifies and implements protective actions for the school population.

(b) Coordinates transportation of Town school populations.

(c) Provides shelter for transient population.

(8) Board of Health

(a) Supports MDPH in providing for Public Health

(9) Special Facilities Coordinator

(a) Advises nursing homes/group, day care centers, private schools and camp populations of emergency classification and protective action directives.

(b) Coordinates transportation for nursing/group home, day care centers, private schools and camp populations.

(c) Notifies major employers and listed historical sites of emergency at PNPS.

(d) Receive results of dosimetry readings from nursing homes and reports to Radiological Officer.

(e) Assists with implementation of Relocation, Reentry and Return activities.

(10) Radiological Officer

(a) Ensure the distribution of dosimetry, KI, and record forms for emergency workers via the Dosimetry Coordinators.

(b) Ensure the distribution of PPE as directed and supplied by Duxbury EMD.

(c) Monitors radiation levels at EOC.

(d) Ensures emergency worker exposure limits established by MDPH are followed during the emergency.

(e) Advises EOC staff and MEMA Region II on emergency worker exposure.

(f) Checks availability of radiological equipment.

(g) Monitors Regional Emergency Worker Monitoring and Decontamination Station (REWMDS) located at the Erwin K. Washburn Primary School, Carver, MA.

(h) Relays or requests permission from MDPH (through MEMA Region II Radiological Officer) for emergency workers to exceed their exposure limits.

(i) Serves as Dosimetry Coordinator for EOC staff.

(j) Ensures that all Radiological procedures are being followed.

(k) Requests any additional resources from Radiological Officer MEMA Region II.

(l) Assists with implementation of Relocation, Reentry and Return activities.

(11) Transportation Officer

(a) Provides transportation resources to the Transportation Dependent Population within Duxbury.

(b) Coordinates provision of transportation with EOC Representatives, Transportation Staging Area Manager, and MEMA Region II Transportation Coordinator.

(c) Assists with implementation of Relocation, Reentry and Return activities.

(12) Public Information Officer (PIO)

(a) Serves as spokesperson to the media.

(b) Provides news statements on town response.

(c) Exchanges information with spokespersons from other response organizations.

(d) Provides for rumor control.

(13) Rumor Control Officer (RCO)

(a) Provides for rumor control for the general public via telephone.

(b) Refers media calls to Joint Information Center.

(c) Apprises Public Information Officer of recurrent rumors.

(14) Shelter Officer

(a) Coordinates operations of public shelters.

(15) Special Needs Group

(a) Ensure notification of special needs population.

(b) Obtains and provides transportation needs for special needs population to Transportation Officer.

(c) Maintains Special Needs list.

(16) Communication Officer and Group

(a) Activate and manage the EOC Communication Center.

(b) Support EOC Operations with Radio Communications.

(17) PNPS Community Liaison

(a) Serves as a resource to the Duxbury Emergency Management Director and elected officials.

(b) Assists the Emergency Management Director, as requested. Monitors town response actions.

(18) Tow Truck Provider

(a) Coordinates tow truck requirements/requests with Duxbury Police Dispatcher.

(b) Provides tow truck service as assigned.

(19) Transportation Liaison

(a) Provides support for Duxbury at the Transportation Staging Area.

b. MEMA Region II Response Organization

The MEMA Region II Response organization is made up of MEMA Region II staff, MEMA SEOC staff, representatives of agencies covered by Executive Order 144 and other groups necessary for the MEMA Region II response program. See Figure A-4.

The MEMA Region II organization is responsible for directly supporting EPZ and reception community response and for coordinating functions that require

Multi-community effort. In addition, MEMA Region II will coordinate information and resources between the State and the communities. The key departments/individuals of MEMA Region II's emergency response organization are Manager, Operations Officer, Radiological Officer, Transportation Officer, Special Facilities Coordinator, Public Information Assistant and Communications Officer. The key personnel shall establish the capability for operations on a 24-hour basis, including manning communication links, as appropriate. The key personnel shall also be responsible for ensuring continuity of resources, including technical, administrative and material support.

(1) MEMA Region II EOC Staff

(a) MEMA Region II Manager

- Activates and manages the MEMA Region II EOC.
- Coordinates support to local communities.
- Obtains additional resources from MEMA SEOC, as required.
- Coordinates reception center activities with EPZ Towns.
- Assists in developing and maintaining the MEMA Region II emergency response program.
- Notifies MEMA Region II Emergency Response Organizations/Facilities.

(b) MEMA Region II Operations Officer

- Coordinates EOC operations.
- Establishes 24-hour staffing for the EOC.

- Assists EOC staff in resolving operational problems.
- Updates EOC staff on a periodic basis.

(c) MEMA Region II Assistant Operations Officer

- Assists Operations Officer in coordinating EOC Operations.

(d) MEMA Region II Local Liaison

- Gathers emergency response information updates from EPZ and Reception Center EOCs.
- Advises MEMA Region II Manager of current status of local activities.

(e) MEMA Region II Public Information Assistant

- Assists the MEMA Region II Manager in providing information about MEMA Region II emergency response to the State Public Information Officer or the MEMA Director.

(f) MEMA Region II Technical Hazards Liaison

- Assists MEMA Region II Manager and support staff concerning implementation of local and MEMA Region II plans and standard operating procedures.

(g) MEMA Region II Radiological Officer

- Monitors PADs, plume characteristics, and dose projections and relays to EOC staff and Town/Agency Radiological Officers.
- Monitors Reception Center and Regional Emergency Worker Monitoring and Decontamination Station with the MDPH, Town and EO-144 Agency Radiological Officers.

- Monitors emergency worker exposures and relays to the MEMA Radiological Officer at MEMA SEOC in Framingham.
- Provides additional radiological equipment to towns, as needed.

(h) MEMA Region II Assistant Radiological Officer

- Assists Radiological Liaison and maintains communications with state, county, Federal emergency workers.

(i) MEMA Region II Transportation Group

- Coordinates additional State and private transportation resources for hospitals, nursing homes, group homes, special needs populations, schools, licensed day care centers, camps, Myles Standish State Forest, and the transportation-dependent public.

(j) MEMA Region II Communications Group

- Coordinates radio communications between MEMA Region II and Town/City emergency response organizations.
- Provides supplementary communications coordination for field operations, as necessary.

(k) MEMA Region II Documentation Unit

- Assures the routing and delivery of EOC messages, incoming and outgoing, internal and external.
- Provides a permanent record of emergency communications.

(l) MEMA Region II Special Facilities Group

- Coordinates assignments of nursing homes, special facilities, mobility impaired, Reception Centers and REWMDS to host facilities.

- Assists school officials in notifying schools outside the EPZ having students who reside within the EPZ.

(m) Administrative Assistant

- Performs administrative duties as requested.

(2) Region II EO 144 Support Staff

(a) Massachusetts State Police Troop D, Middleborough, Troop Commander

- Activates and coordinates the Traffic Control Plan.
- Coordinates and supports state traffic and access control resources.
- Supports EPZ towns in providing security for evacuated areas.
- Provides security at the MEMA Region II EOC.
- Establish operations on a 24-hour basis.

(b) Massachusetts Department of Transportation (Mass DOT) Maintenance Engineer

- Coordinates state traffic and access control equipment support (barricades, signs, traffic cones, etc.).
- Assists local public works departments to assure that roads remain passable.
- Coordinates Mass DOT activities with other Districts.
- Establish operations on a 24-hour basis.

(c) Massachusetts National Guard Task Force Commander

- Coordinates National Guard transportation resources.
- Coordinates National Guard support for traffic and access control, and security for evacuated areas.
- Provides resource support for state response activities.
- Establish operations on a 24-hour basis.

(d) Department of Conservation and Recreation, Myles Standish State Forest, Principal Forest and Park Supervisor

- Performs notification of visitors at State Forest.
- Establishes access and traffic control in the Forest.
- Establishes operations on a 24-hour basis.

(e) Department of Correction (DOC)

- Performs notification of inmates and staff at MCI-Plymouth.
- Coordinates actions necessary for the protection (sheltering or evacuation) of staff and inmates.

- Provides a Host Detention Facility at DOC-Bridgewater Complex for inmates and staff of MCI-Plymouth and Plymouth County Correction Facility.

(f) Plymouth County Sheriff's Department

- Performs notification of inmates and staff at Plymouth County Correction Facility.
- Coordinates actions necessary for the protection (sheltering or evacuation) of staff and inmates.
- Establish operations on a 24-hour basis.

(g) American Red Cross EOC Representative

- Coordinates Red Cross activities at mass care shelters.
- Maintains communication with State, field and Reception Center Communities ARC contact.
- Establish operations on a 24-hour basis.

(h) Massachusetts Bay Transportation Authority (MBTA) Representative

- Provides transportation equipment for the Department of Correction, MCI-Plymouth and Plymouth County Correction facilities as requested.
- Provides additional vehicles, if required, to augment transportation providers.
- Coordinates EPZ commuter rail activities.

c. MEMA SEOC Response Organization - SEOC

The MEMA SEOC Response Organization is responsible for overall direction of the response, coordination of State resources to support community response, and for performing technical response functions on behalf of the communities. The State EOC will coordinate support to the communities through MEMA Region II. The key departments of the SEOC emergency response organization are listed below along with their respective response functions. The supervisory personnel as indicated in parentheses for the following departments or agencies are responsible for establishing 24-hour operations and continuity of resources.

(1) MEMA SEOC Staff

(a) Governor

- Provides overall command and control.
- May issue public information statements.
- Authorizes Protective Action Directives.
- Declares State of Emergency.

(b) MEMA (Director)

- Activates and manages the State EOC.
- Coordinates public notification.
- Activates sirens and the Emergency Alert System (EAS).
- Forwards protective actions to the Governor in conjunction with MDPH recommendations.
- Issues Protective Action Directives to MEMA Region II and local officials which may include precautionary actions.
- Coordinates State resources.
- Establishes 24-hour staffing of State EOC.

- Controls access of air and rail traffic (see Exhibit 6, Letters of Agreement, in the State Radiological Emergency Response Plan [RERP]).
- Disseminates information in advance of an emergency to inform the public of actions to take during the emergency.
- Develops and maintains the State radiological emergency response program.
- Provides additional radiological equipment for emergency workers.
- Provides additional resources to local communities through MEMA Region II.
- Conducts drills, exercises, training, and system tests.
- Provides a representative to the PNPS Emergency Operations Facility (EOF) and Joint Information Center.

(c) MDPH

- Recommends protective actions to MEMA for forwarding to the Governor.
- Performs accident assessment functions.
- Coordinates environmental monitoring and sampling.
- Performs facility and individual monitoring and implements decontamination recommendations as required.
- Provides for laboratory analysis of environmental samples.
- Coordinates with Federal agencies providing radiological technical support.
- Provides for exposure control for emergency workers.

- Provides monitoring and decontamination guidance for emergency workers.
- Recommends to MEMA activities related to relocation, re-entry, or return of the public.
- Establishes protective actions for the ingestion exposure pathway EPZ.
- Authorizes the use of potassium iodide (KI) for emergency workers (Commissioner or designee).
- Maintains statewide list of public, private and military hospitals.
- Disseminates public information to the agricultural communities within the ingestion exposure pathway (50 miles).

(d) Massachusetts State Police Headquarters (Colonel)

- Provides support for traffic and access control through Troop D at the MEMA Region II EOC.
- Provides security for State EOCs.
- Provides support for town police departments through MEMA Region II EOC.

(e) Massachusetts Department of Transportation (Mass DOT) Headquarters (Commissioner)

- Provides traffic and access control equipment.
- Provides resources to keep roads passable.

- Provides support to local public works departments through MEMA Region II EOC.

(f) Massachusetts National Guard Headquarters (Adjutant General)

- Supports law enforcement agencies for access control and security for evacuated areas.
- Transports emergency supplies.

(g) Massachusetts Department of Environmental Protection (Water Supply Division Director)

- Collects water samples within the ingestion exposure pathway EPZ upon request of MDPH.
- Restricts the use of public drinking water supplies found to be contaminated.

(h) Massachusetts Department of Conservation and Recreation (Forest and Parks Division Director)

- Provides emergency notification and clearing of the public in state parks.

(i) Massachusetts Department of Agricultural Resources (Commissioner)

- Controls contaminated foodstuffs.
- Maintains list of agricultural facilities within the ingestion exposure pathway EPZ.

- Collects agricultural-related samples upon the request of MDPH.

(j) Massachusetts Department of Fish and Game (Commissioner)

- Collects shellfish samples within the ingestion exposure pathway EPZ upon the request of MDPH.
- Controls contaminated aquatic foods.

(k) Department of Correction (Commissioner)

- Coordinates actions necessary to support evacuation of MCI-Plymouth.
- Provides assistance, and support if requested and as resources allow, in the evacuation of the Plymouth County Correction Facility.
- Provides a Host Detention Facility at the Department of Correction Bridgewater Complex for inmates and staff of MCI-Plymouth and Plymouth County Correction Facility.

(l) American Red Cross (ARC EOC Officer)

- Supports operations of Mass Care Shelters and Reception Centers.

(m) U.S. Coast Guard (First Coast Guard District Commander)

- Provides emergency notification over Marine Radio to boaters operating between Boston and Providence, RI.
- Coordinates access control to marine areas.

- Coordinates response actions with Town Harbormasters.
- Coordinates exposure control of USCG personnel with MEMA Region II.

d. Federal

The Federal Government is responsible for providing both technical and operational support to the communities through the State. The key departments of the federal response are identified, along with their respective response functions. Supervisory personnel, as indicated in parenthesis for the following departments or agencies, are responsible for establishing 24-hour operations and continuity of resources.

(1) Federal Agency Assignments

(a) Nuclear Regulatory Commission (Region I Director)

- Assesses nature and extent of radiological incident onsite.
- Assesses potential offsite consequences.
- Provides technical advice and recommendations for protective actions.

(b) Federal Emergency Management Agency (Region I Director)

- Coordinates overall offsite federal response.
- Provides federal resources and assistance to State and Town/City governments.
- Ensures adequate federal agency support exists for recovery operations.
- Provides a liaison to the State EOC.

(c) Department of Energy (Region I Director)

- Activates Federal Radiological Monitoring and Assessment Plan (FRMAP).
- Provides radiological monitoring and sampling assistance.
- Provides assessment and evaluation assistance.

(d) Department of Agriculture (Region Director)

- Coordinates with and supports State and local governments in protecting and assessing the damage to agricultural products.
- Procures food for emergency feeding programs.
- Provides technical information and advice for farmers.

(e) Environmental Protection Agency (Region Director)

- Assists with field radiological monitoring and sampling.
- Provides guidance in formulating protective action advisories.
- Assists with relocation, reentry and return guidance.
- Coordinates post-emergency federal radiological monitoring and sampling activities.

(f) Department of Transportation (Director of Emergency Transportation)

- Assists State and local jurisdictions with department resources, including equipment needed for impediment removal.

(g) Department of Health and Human Services (Emergency Coordinator)

- Assists in testing food products for safety.
- Ensures availability of essential human services.

(h) Department of Housing and Urban Development (Emergency Coordinator)

- Plans for and provides emergency housing.

(i) National Communications System (Regional Emergency Communications)

- Provides for essential communications requirements in an emergency area.
- Supports Federal communications needs.

(j) Federal Aviation Administration (Regional Director)

- Restricts airspace within a 10-mile radius of PNPS during emergency as requested through the Massachusetts Aeronautics Commission.

(k) Department of Commerce

- Provides, via NOAA, current and forecast meteorological information.

e. Utility (Emergency Director)

PNPS is responsible for providing emergency notification and technical information to the State in support of the Town response. The Utility's response functions are as follows:

(1) Provides timely emergency notification to offsite emergency response organizations.

(2) Provides pertinent data from onsite and offsite radiological monitoring to MEMA and MDPH.

(3) Provides current, concise accident assessment data.

(4) Provides recommendations for offsite protective actions.

(5) Operates the EOF.

(6) Establishes the Joint Information Center.

(7) Sponsors annual media orientation training.

(8) Provides for processing emergency worker Dosimetry Life Records (DLRs) on a 24-hour basis during an emergency.

(9) Establish operations on a 24-hour basis.

f. Private

(1) Bus Companies (Owner/Operator)

Provides transportation support for evacuation in the form of vehicles and drivers.

(2) Ambulance Companies (Owner/Operator)

Provides transportation for the evacuation of hospitals, nursing homes and members of the public with serious medical problems.

(3) Hospitals (Administrator)

(a) Serves as host facilities for evacuating hospitals, nursing homes, and certain special needs individuals.

(b) Provides treatment for those who are contaminated and/or injured.

Figure A-1

Duxbury Emergency Response Organization

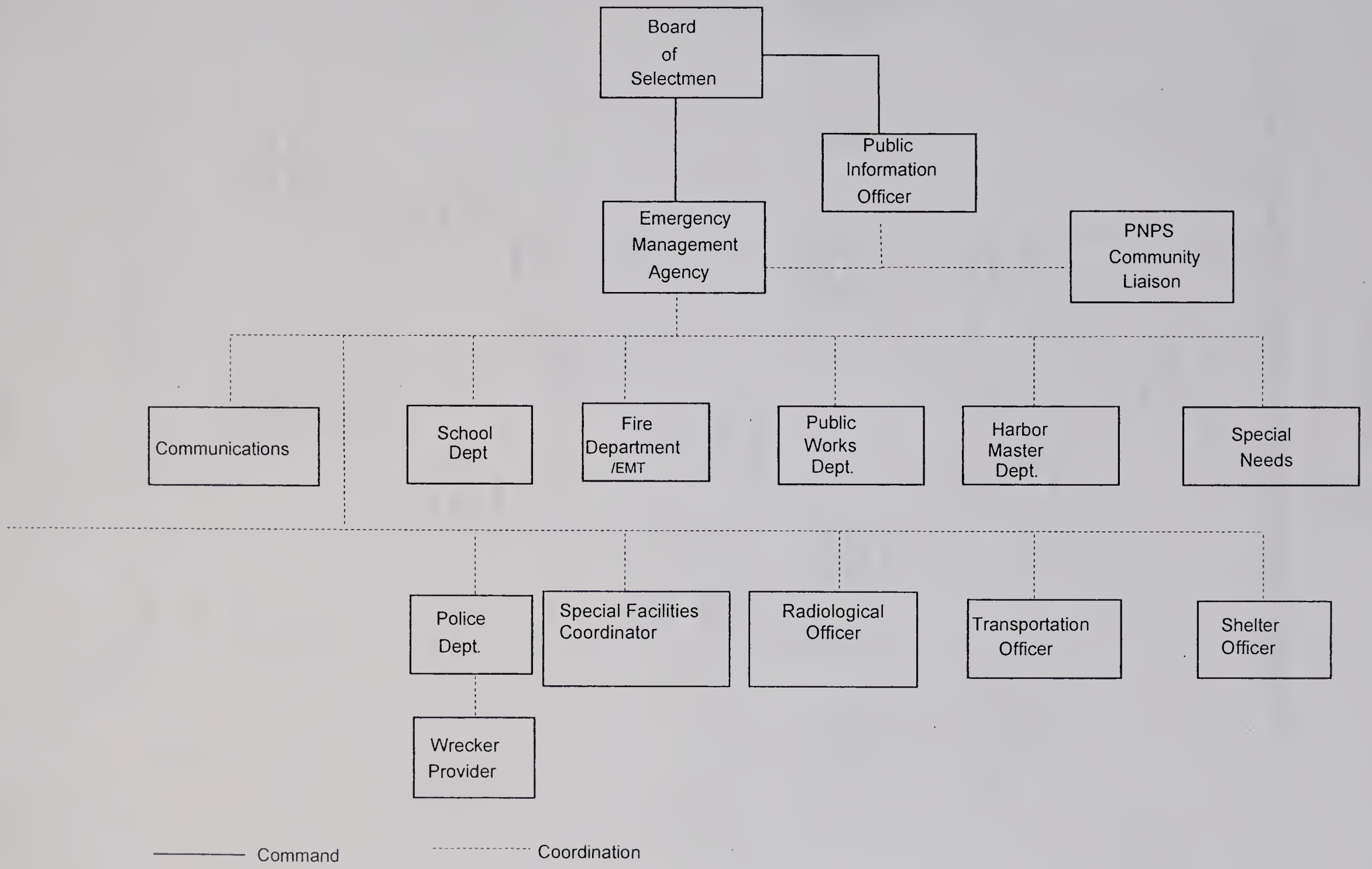


FIGURE A-2

EMERGENCY RESPONSE ORGANIZATION INTERRELATIONSHIPS

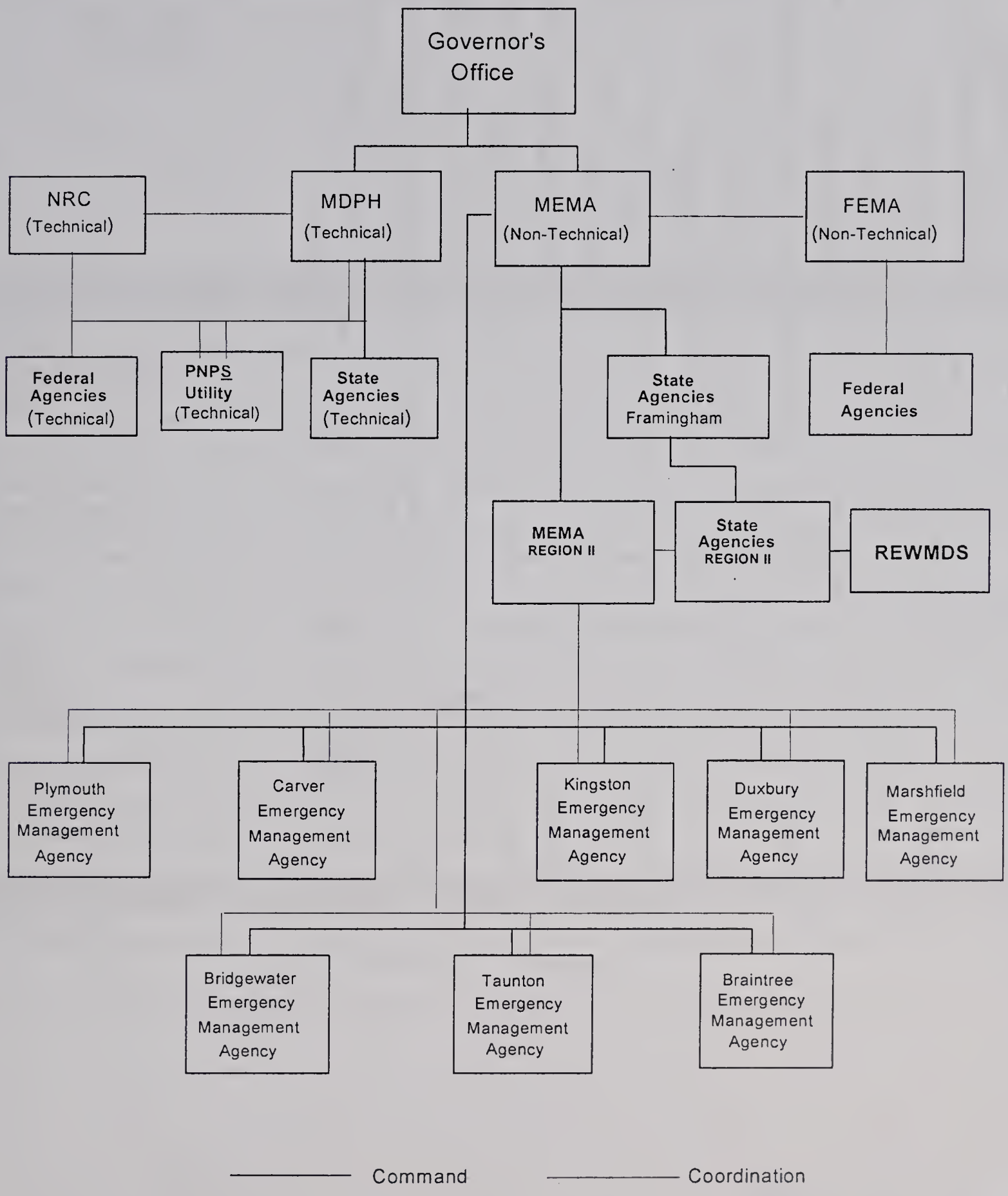


FIGURE A-3

Town Emergency Organization Responsibilities

Emergency Organization Responsibilities

Responsible Departments/ Individuals \ Response Functions	Command and Control	Public Notification	Notification and Communication	Public Information	Accident Assessment	Public Health	Social Services	Fire and Resue	Traffic and Access Control	Emergency Medical Services	Law Enforcement	Transportation	Protective Response	Radiological Exposure Control	Resources and Equipment	Food, Water, Milk Control	Relocation, Re-entry, Return
TOWN																	
Board of Selectman	P			S									P				S
Emergency Management Director	S		P										S	S	P		S
Police Department		S							P		P		S	S			S
Fire Department		S	S					P		S			S	S			S
Special Needs		S										S			S		S
Department of Public Works		S							S				S	S		S	S
Harbormaster		S							S		S		S	S			
School Department												S	S				
Board of Health													S	S	S		S
Radiological Officer														P			
Transportation Officer												S			S		
Public Information Officer				P													
Shelter Officer													S				
Communications Officer			S												S		S
COUNTY																	
County Sheriff's Department									S		S		S				

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P=Primary S=Support

FIGURE A-4

Region II Special Facilities Coordinator			S														
State Police Troop D									S		S		S				S
Mass DOT									S						S		
National Guard									S		S	S			S		S
American Red Cross							S						S				
MBTA												S					
MEMA - SEOC																	
Governor's Office	P			P									P				P
MEMA/OEP	S	P	S	S	S								S	S	S		S
Department of Public Health				S	P	P							S	P		P	P
State Police									S		S		S				S
Mass DOT									S						S		
National Guard									S		S	S			S		S
Department of Environmental Protection																S	S
Department of Conservation and Recreation		S						S					S				
Agricultural Resources					S											S	S
Department of Fish and Game					S											S	S
American Red Cross							S										
Civil Air Patrol												S					
PNPS Commonwealth Liaison													S				
FEDERAL																	
U.S. Coast Guard		S							S				S				S
NRC				S	P								S				S
NOAA													S				
FEMA					S								S		S		S
Department of Energy					S	S											S
Department of Agriculture					S	S										S	S
Environmental Protection Agency					S	S										S	S
Department of Transportation					S								S			S	
Health and Human Resources					S		S	S									
Housing and Urban Development					S				S								
National Communications System				S													
Federal Aviation Administration													S				
UTILITIY																	
PNPS			P		P								S		S		
PRIVATE ORGANIZATIONS																	
Bus providers												S					
Ambulance Providers							S			P		S					
Hospitals							S			P				S			
LOCAL RESPONSE ORGANIZATIONS																	
See Individual Plans																	

P=Primary S=Support

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SECTION II - FUNCTIONS

PART B - ONSITE EMERGENCY ORGANIZATION

The Town of Duxbury has no responsibilities for the Onsite Emergency Organization at the Pilgrim Nuclear Power Station.

Information on the onsite emergency organization is in the Pilgrim Nuclear Power Station Emergency Plan.

SECTION II - FUNCTIONS

PART C - EMERGENCY RESPONSE SUPPORT AND RESOURCES

1. Purpose

This part identifies the resources in the Town of Duxbury available to support the Federal response and identifies other organizations which may provide support for Federal response in the Town of Duxbury.

2. Town of Duxbury Resources

a. The State, Federal, and private organizations supporting the emergency response within the Town of Duxbury are largely self-sufficient; that is, they have their own manpower and equipment. However, in some instances, these organizations may require support from the Town.

b. Town resources available to support Federal, State, and private organizations during an emergency at PNPS include:

(1) Enclosed building(s) for work space.

(2) Communications assistance.

3. Sources of Additional Assistance

a. The Emergency Management Director will evalulate requests for Town assistance or additional resources from other response organizations. These requests will be satisfied from resources within the Town of Duxbury, to the extent possible. If requirements cannot be satisfied with resources from within the Town, the Town Board of Selectmen will direct requests indicating additional needs to the MEMA Region II Office.

b. PNPS, MDPH and MEMA have the responsibility to initiate and maintain agreements with facilities, organizations, and individuals which can be relied upon in an emergency to provide assistance of a technical and other nature to PNPS, as needed.

4. Representation at the Emergency Operations Facility

The Town will not dispatch a representative to the PNPS Emergency Operations Facility (EOF). State technical representatives at the EOF will serve as liaison between the Town and PNPS onsite emergency response organization.

SECTION II - FUNCTIONS

PART D - EMERGENCY CLASSIFICATION SYSTEM

1. Purpose

This part identifies the standard emergency classification and action level scheme used by the Utility, State and Town response organizations and the basic response actions to be taken by the Town of Duxbury for each classification level. These classifications from the least serious to most serious are: UNUSUAL EVENT, ALERT, SITE AREA EMERGENCY and GENERAL EMERGENCY.

2. Emergency Classification Levels

a. UNUSUAL EVENT

The Unusual Event (UE) classification applies to an unusual plant condition that either has occurred or is in process, which indicates a potential degradation of the level of plant safety or indicates a security threat to facility protection. Inherently, however, this is a situation in which time is available for the plant operator to take precautionary and constructive steps to prevent a more serious event or to mitigate any consequences that may occur. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

b. ALERT

The purpose of this classification is to 1) ensure emergency personnel are readily available to respond if the situation becomes more serious; and 2) provide offsite authorities with current status information. Indicates that events are in process, or have occurred, that involve an actual, or potential substantial degradation of the level of plant safety or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. Although the potential for limited releases of radioactivity in excess of plant technical specification limits may exist, the initial assessment leading to this classification indicates that it is unlikely that an offisite hazard will be created. Any releses which do occur would be expected to be limited to a small fraction of the protective action guide levels.

c. SITE AREA EMERGENCY

The Site Area Emergency (SAE) classification is declared when events at the plant are in progress or have occurred which involve actual or impending failures of plant functions needed for protection of the public or security events that result in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevent effective access to equipment needed for the protection of the public. At SAE, there is a potential for offsite releases that could impact the public requiring recommendation of protective actions. Any releases, which do occur, would not be expected to exceed protective action guide levels beyond the site boundary.

d. GENERAL EMERGENCY

The General Emergency (GE) classification indicates that events at the plant are in progress or have occurred which involve actual or imminent substantial core degradation or melting, and a potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases can reasonably be expected to exceed protective action guide exposure levels offsite beyond the immediate site area.

3. Response Actions by Classification Level

Upon notification of an emergency situation, Town, State and Federal response agencies, and quasi-government and private volunteer organizations will mobilize to provide the manpower, equipment and expertise to accomplish appropriate response actions. Emergency response actions will be consistent with recommendations from the Utility and appropriate State and Federal agencies. Time permitting, response actions will take into account existing off-site conditions. The basic response actions to be taken by the Town of Duxbury for each emergency classification level are indicated in Figure D-1.

FIGURE D-1

TOWN RESPONSE ACTIONS BY CLASSIFICATION LEVEL

UNUSUAL EVENT

	Action	Responsible Agency
1.	Notify key Town officials.	Public Safety Dispatch Center
2.	Respond to Media inquiries, as required.	Board of Selectmen

ALERT

	Action	Responsible Agency
1.	Notify the Emergency Response Organization.	Public Safety Dispatch Center
2.	Mobilize EOC staff and activate EOC.	Emergency Management Agency
3.	Establish EOC security.	Police Department
4.	Distribute dosimetry to EOC staff. Distribute PPE as directed and supplied by Duxbury EMD.	Radiological Officer
5.	Establish communications with State Region II and with Towns.	Emergency Management Agency
6.	Provide news statements to the MEMA PIO at the Joint Information Center.	Board of Selectmen Public Information Officer (PIO)
7.	Notify public schools and determine transportation and KI requirements.	School Department
8.	Notify nursing/group homes, day cares, private schools, children's camps, major employers, and historical sites.	Special Facilities Coordinator
9.	Determine transportation requirements for children's camp, day cares, private schools, and nursing/group homes.	Special Facilities Coordinator
10.	Position transportation vehicles at schools, day cares and children's camps.	Transportation Officer

	Action	Responsible Agency
11	Verify special assistance requirements for Mobility Impaired.	Special Needs Group
12.	Close and control access to recreation sites, beaches and marine areas.	Police Department Harbormaster
13.	Notify MEMA Region II for additional transportation needs.	Transportation Officer
14.	Notify off-duty personnel as required.	Department Heads
15.	Distribute Dosimetry to emergency workers. Distribute PPE as directed and supplied by Duxbury EMD.	Dosimetry Coordinator
16.	Deliver and erect Access Control Equipment to Recreational Areas.	DPW - Highway Department
17.	Notify shelter manager to place shelter staff on standby.	Shelter Officer
18.	Issue a "Local Declaration of Emergency"	Selectmen

SITE AREA EMERGENCY

	Action	Responsible Agency
1.	Activate sirens for public notification as backup to SEOC. * Activate MNS.	Public Safety Dispatch Center MEMA SEOC
2.	Conduct route alerting in the event of siren failure. Deploy Duxbury message boards.	Fire Department with assistance from Police if needed.
3.	Provide news statements to MEMA PIO at the Joint Information Center	Board of Selectmen Public Information
4.	Notify agency personnel and special facilities of emergency level.	EOC Representatives
5.	Relocate all school population, day cares, and children's camps to host facilities.	School Department Transportation Officer Special Facilities Coordinator

* Sirens must be activated within fifteen minutes of the State's decision to notify the public.

Action		Responsible Agency
6.	Notify public shelter managers to prepare buildings for use.	Shelter Officer School Superintendent
7.	Stage transportation vehicles for general population and Health Care Facilities.	Transportation Officer
8.	Staff traffic control points.	Police Department
9.	Control access to recreational sites, beaches and marine areas.	Police Department Harbormaster
10.	Maintain evacuation routes.	Department of Public Works
11.	Deliver all Traffic and Access Control equipment.	Department of Public Works

GENERAL EMERGENCY

Action		Responsible Agency
1.	Activate sirens for public notification, as backup to SEOC,* and tone alert monitors for special facility notification. Activate MNS.	Public Safety Dispatcher
2.	Conduct route alerting in the event of siren failure. Deploy Duxbury message boards.	Fire Department and Fire Department and Police Department if necessary
3.	Issue news statements to public through Media Center.	Board of Selectmen
4.	Notify agency personnel and special facilities of protective action directives.	EOC Representatives
5.	Implement protective action directives.	Emergency Management Agency
6.	Set up and activate all traffic control points.	Police Department Department of Public Works
7.	Monitor and report emergency worker exposures to MEMA.	Radiological Officer Dosimetry Coordinators
8.	Advise emergency workers to take KI when recommended by MDPH.	Radiological Officer Dosimetry Coordinators

* Sirens must be activated within fifteen minutes of the State's decision to take protective action.

IF SHELTERING

	Action	Responsible Agency
9.	Open public shelters	Shelter Officer Shelter Managers School Department
10.	Activate shelter shuttle for transient beach population.	Transportation Officer
11.	Release information on public and non-public shelters.	Public Information Officer
12.	Set up and activate access control points, as required.	Police Department Department of Public Works

IF EVACUATION

	Action	Responsible Agency
13	Provide transportation to transit-dependent, and activate bus routes.	Transportation Officer Staging Area Team
14.	Evacuate transportation dependent to Reception Center.	Transportation Officer Staging Area Team
15.	Provide security for evacuated areas.	Police Department Harbormaster U.S. Coast Guard National Guard and Mass. State Police
16	If EOC is directed to evacuate, dispatch key EOC staff to alternate EOC.	EM Director
17.	Release public information on evacuation through MEMA PIO at the Joint Information Center.	PIO
18.	Set up and activate traffic and control points, as required.	Police Department Department of Public Works

PART E - EMERGENCY NOTIFICATION - METHODS AND PROCEDURES

1. Purpose

This part outlines procedures for notification of the Duxbury emergency response organization, and notification and mobilization of emergency response personnel. It establishes the administrative and physical means for activating the Prompt Alert and Notification System and for providing instructions to the public through the Emergency Alert System (EAS) using pre-written messages that include specific protective actions.

2. Initial Notification

a. After the classification and declaration of an emergency at Pilgrim Nuclear Power Station (PNPS), the Emergency Director (Operations Shift Manager) will notify Emergency Planning Zone (EPZ) Towns, Reception Communities, and MEMA Headquarters via a dedicated notification network (DNN) (see Figure E-1).

b. A standard Initial Notification Form (under separate cover) will be used by the Control Room, Emergency Operations Facility (EOF), and all offsite notification points. Programmable telecopiers in the control room and the EOF will be

used to send completed notification forms to all notification points simultaneously. The telecopied form will serve to verify the accuracy of the telephone notification information.

c. A dedicated telephone and telecopier (i.e., DNN System) are located at the Duxbury Public Safety Dispatcher, as well as in the Town EOC. Responsibility for monitoring the DNN system will be transferred from the Public Safety Dispatcher to the EOC upon activation of the EOC.

d. Notification information will include the emergency classification, time of incident, brief description of the incident, whether or not a release is in progress, protective actions recommended by the Utility (if any), affected population by subarea, and time of notification. Only protective action directives issued by MEMA are to be implemented by EPZ towns.

e. The Duxbury Public Safety Dispatcher is the Town 24-hour warning point. The Public Safety Dispatcher will receive notification via the DNN system. Upon receipt of an "Unusual Event" notification, the Public Safety Dispatcher will be responsible for notifying the Selectmen, Emergency Management Director, Town Manager and key staff in accordance with "Unusual Event" emergency notification list.

f. At the ALERT level or higher level, the Duxbury Public Safety Dispatcher will notify agencies/individuals in the Town emergency response organization using MNS and commercial telephone, and request they report to the EOC. Radio systems will be used as the backup method of notification (see Figure E-2).

g. Each Town agency will notify and activate its personnel by radio, MNS, or telephone. Primary means to activate supervisory or on-duty personnel will be by radio or MNS.

3. Follow-up Information

a. The PNPS Emergency Director (or the Emergency Offsite Manager, once the Emergency Operations Facility (EOF) is activated, will maintain contact with State officials and ensure that follow-up information is provided to them. The State will receive follow-up information containing essential emergency information sent by PNPS direct to town by the DNN System.

b. The Duxbury Emergency Management Director and Selectmen will be advised by State officials over BECONS concerning the emergency including siren activation times, protective action directives, and EAS activation times. Copies of EAS messages will be telefaxed to EPZ towns from MEMA SEOC. The Emergency Management Director will disseminate this information by announcements to EOC staff, and department officials will keep personnel under their control, advised of the changing situation.

4. Verifying Notifications to Response Organizations

All notifications and messages will be verified by the 24-hour dispatch center (Public Safety Dispatcher) or EOC when these notifications and messages refer to changes in the Emergency Classification Level (ECL). Verification of messages will occur at all classification levels and will be accomplished by DNN system.

5. Public Notification

a. Primary

The Town of Duxbury has the capability to provide both an alert signal and an instructional message to its population within a timely manner following the State's decision to issue a Protective Action Directive and/or provide emergency information to the public.

The primary method of notifying the public is through the Prompt Alert and Notification System, consisting of 113 sirens and 5 primary radio stations covering the 10-mile EPZ (see Figure E-3). The Town of Duxbury has eighteen sirens within its portion of the 10-mile EPZ which can be activated by the Public Safety Dispatcher as backup to SEOC. The State has responsibility for authorizing, coordinating and activating sirens and EAS broadcasts. Sirens will not be sounded until the State has coordinated activation of the Emergency Alert System.

EPZ towns are responsible for implementation of siren activation as backup to SEOC and as directed by MEMA. When the State determines the need to sound sirens, sirens will be activated simultaneously in all EPZ towns.

State policy dictates that sirens may be activated at ALERT, must be activated at SITE AREA EMERGENCY and GENERAL EMERGENCY, and must be activated upon issuance of a protective action directive.

The sirens alert the public to tune their radios to predesignated EAS stations. The EAS includes the following radio stations for the purpose of this plan:

(1) (FM) 98.5 Boston

(2) (FM) 99.1 Plymouth

(3) (AM) 1390 Plymouth

(4) (FM) 95.9 Marshfield

(5) (AM) 10.30 Boston

The messages which are pre-scripted by MEMA will be broadcast by the EAS network along with any protective actions directed by Massachusetts Department of Public Health. The State will activate the EAS and select and initiate broadcast of appropriate EAS messages for the EPZ Towns.

b. Backup Means of Public Notification

(1) Route alert teams, using public address systems will drive through areas where a siren failure has been indicated and read the Route Alert Message which instructs the public to tune to an EAS station. Maps and instructions have been developed for each siren coverage area. Teams will be comprised of Duxbury Fire Department with Duxbury Police Department personnel as back-up.

(2) The town of Duxbury has the ability to notify the public via the Massachusetts Notification System (MNS) at the discretion of the Emergency Management Director.

6. Special Notification of Public

Pre-identified schools, health care facilities, group homes, detention centers, employment centers, recreation areas, beaches, marinas, ponds, historic sites, parks, and camps, along with severe hearing impaired residents, and boaters, within the 10-mile EPZ will be notified of an emergency at PNPS.

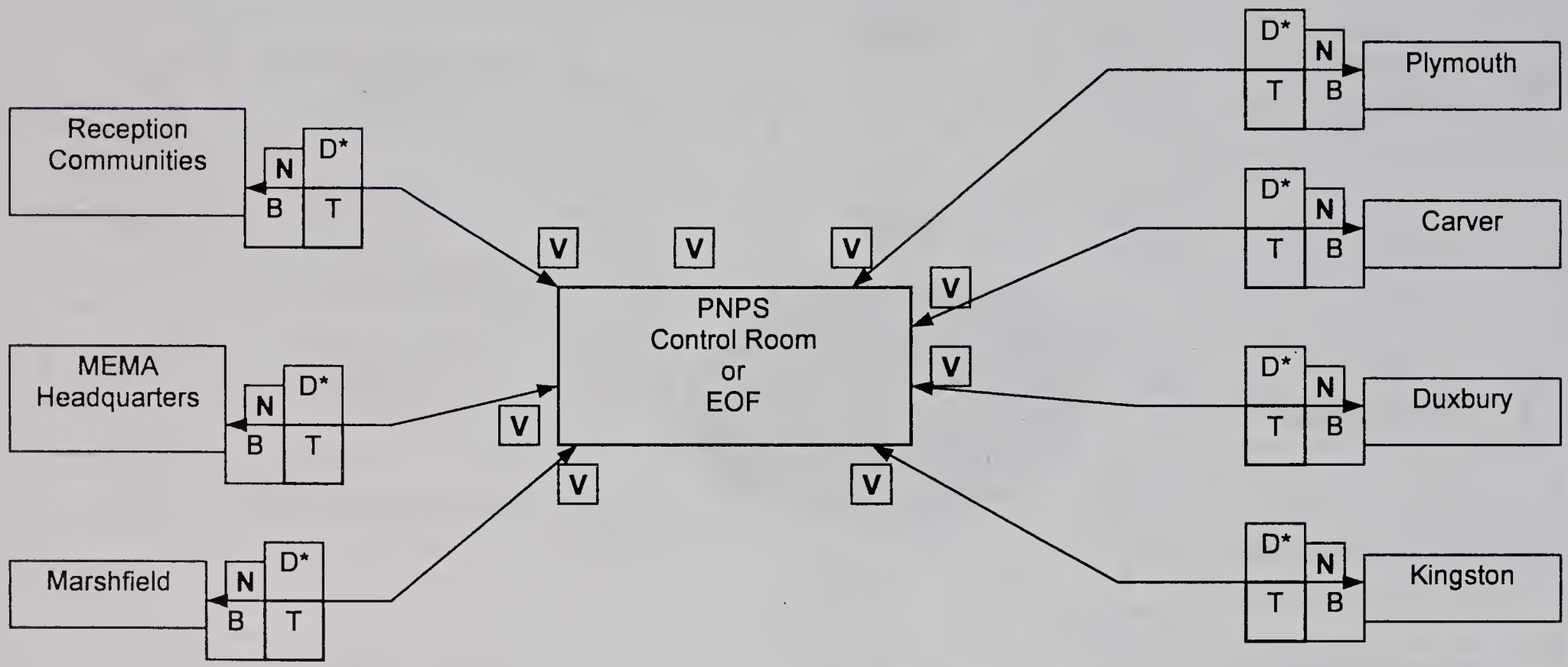
a. Special needs residents will be notified by Special Needs staff using the Teletyperwriter for the hearing impaired (TTY) system. TTY for initiating notification to the hearing impaired are located in the Public Safety Dispatcher Dispatch Center and EOC support area.

b. Schools, major employers, health care facilities, group homes, historic sites, detention centers, parks, camps, and recreation areas will be notified by tone alert radios activated by the EAS tone. Specific locations of tone alert monitors are listed in Figure E-4.

c. The public, commercial boating population, and marinas will receive notification from the Harbormaster and U.S. Coast Guard boats equipped with public address systems. Additional notification is also completed by marine and citizen band (CB) radios to those boats that are radio equipped.

d. Beach and pond visitors will be notified by personnel from the Duxbury Harbormaster and the Duxbury Police Department who will use Public Address Systems. In addition, the Harbormaster will assist Plymouth in the Notification of Clark's Island areas.

Figure E-1
Notification of Offsite Emergency Response Organizations



Legend

D = Dedicated Notification Network T = Commercial Telephone * = Primary Notification Method

B = BECONS Radio N = Notification V = Verification

FIGURE E-2

Notification of Duxbury Emergency Response Organizations

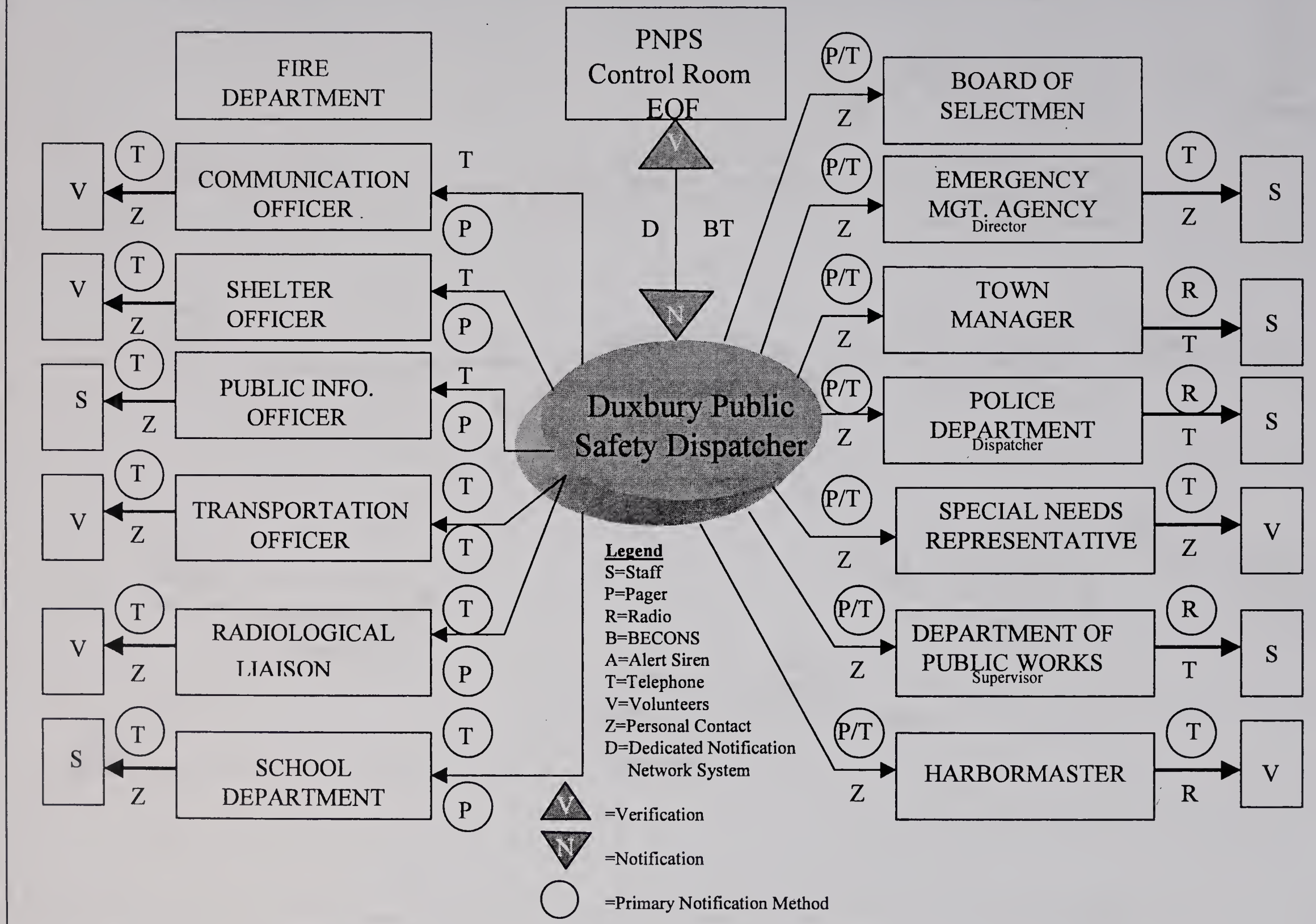


FIGURE E-3

Prompt Notification System for the Public

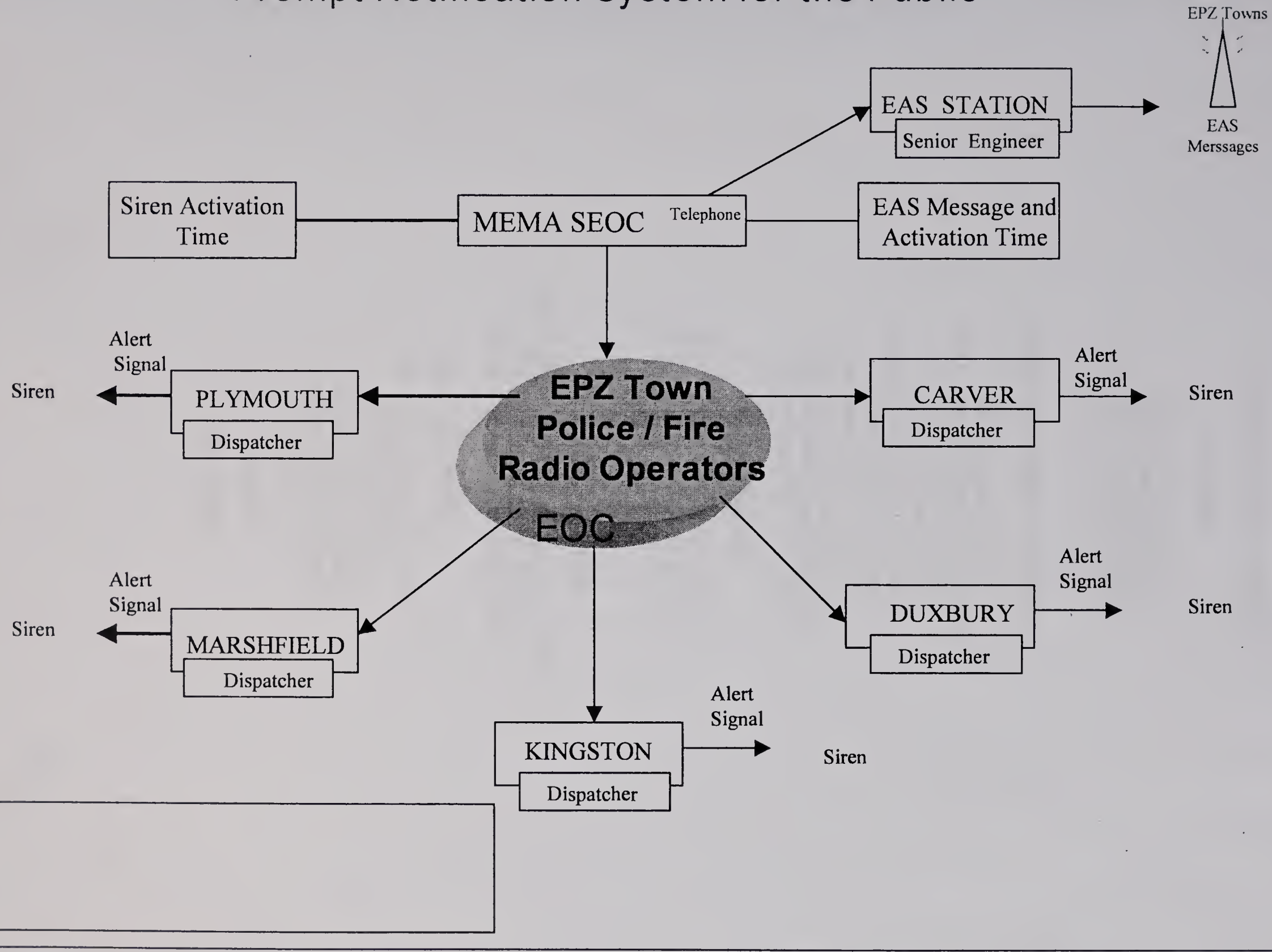


FIGURE E-4

Tone Alert Monitor Locations

Schools

Duxbury High School
Duxbury Middle School
Chandler Elementary School
Alden Elementary School

Nursery Schools/Day Care Centers

Berrybrook School
Good Shepard Christian Academy
Learn in Play Preschool
Pied Piper Preschool
Magic Dragon Children Center
Pilgrim Day Child Care
Discovery Corner Day Care
Blue River Montessori School
Elements Montessori School
Pilgrim Area Collaborative

Private Schools

Bay Farm Montessori Academy
Duxbury Bay Maritime School

Nursing/Group Homes

Bay Path/Duxbury House Nursing Home
Group Facility at North Hill
Group Facility at Cordwood Path

Shelters

Alden Elementary School
Chandler School
Duxbury Free Library
Duxbury High School
Duxbury Middle School
Senior Center

Camps

Camp Wing

SECTION II - FUNCTIONS

PART F - EMERGENCY COMMUNICATIONS

1. Purpose

This part provides information on the Town of Duxbury Communications Network which is used to maintain communications with principal emergency response organizations and Town response agencies during an emergency at the Pilgrim Nuclear Power Station (PNPS).

2. Emergency Communications Coordination

The Town Emergency Operations Center (EOC) is located adjacent to the Central Fire Station and is the focal point for coordination of emergency communications. It has telephone and radio communications capabilities.

3. Communications Network Description

The primary method for EOC emergency communications is BECONS and commercial telephone with radio systems as backup. The Town EOC communications links with emergency response organizations and Town response agencies are illustrated in Figure F-1 which represents a major part of the available communications capability. Additional communications links (not illustrated) exist to support the network.

Communications links between the EOC and Town departments include Police, Fire, Public Works, Harbormaster and the School. In addition, EOC communications links have been established with the MEMA State EOC via the MEMA Region II EOC, other Town EOC's, Transportation Staging Areas, the Media Center, and hospitals using telephone and radio systems.

These communications links are also used to support coordination of school buses, chairlift vans, ambulances and traffic control points. Furthermore, the transmittal/receipt of hard copy information in the EOC is available through the use of a telefax machine to communicate with the Joint Information Center and other EOC's.

4. Emergency Notifications

The Public Safety Dispatch Center is the 24-hour warning point for the town of Duxbury. Declaration of an emergency classification at PNPS will come from the Emergency Director (Operations Shift Manager). Such notification will be made using the DNN system and telecopier system. BECONS and commercial telephone will serve as backup Notification Systems.

Upon receipt of the initial emergency notification, the Public Safety Dispatcher will notify the appropriate Town response agencies. These notifications will be accomplished using commercial telephones and MNS (See Section II, Part E for details of notification to Town emergency personnel).

5. Federal Agency Link

Communications with Federal agencies are made through the MEMA Region II EOC in Bridgewater and the MEMA SEOC in Framingham using National Warning System (NAWAS), The Federal Telecommunications System (FTS), and/or Commercial Telephone as appropriate to the agency being contacted.

6. Contiguous State Link

Communications with the State of Rhode Island, which is within the 50-mile EPZ, are established through the MEMA Region II EOC and MEMA SEOC, Framingham using the National Warning System (NAWAS) with Dedicated Telephone System with Commercial Telephone as the backup method.

7. State Agency Link

Communications with State agencies are primarily made using Commercial Telephone and BECONS with Radio Amateur Civil Emergency Services (RACES) Radio and backup. The activation and use of the Emergency Alert System EAS is accomplished through the State EOC using commercial telephone with Remote Pickup Unit (RPU) radio as the backup method.

8. Duxbury EOC to the Plant's Emergency Operations Facility (EOF) and Other Town EOC's

Communications between the Town of Duxbury EOC and the EOF are accomplished through the MEMA Region II EOC (in Bridgewater) and MEMA SEOC. From the State EOC to the EOF, the primary method of communications is commercial telephone with the BECONS as the backup method.

Communications to other Town EOC's is by BECONS and by commercial telephone with RACES/ARES radio and other town radio nets as the backup method.

9. Duxbury Response Agency Links

Communications with Town emergency response agencies are made using MNS/commercial telephones in the Town EOC as the primary method and with radios in the EOC Communications Center as the backup method. Town agency Representatives which would be located in the EOC include the Police, Fire, Public Works, and School Departments. Radio operators from these departments provide the staffing for the EOC Communications Center. Communications with Traffic Control Points are accomplished through the Police Department using 2-way radios. Communications with non-town traffic control points are effected through MEMA Region II.

10. Medical Support Links

Communications with hospitals are made using commercial telephone with radio as the backup method. Both the Fire/EMS Department and the hospitals are capable of communicating with ambulances using a radio system established under C-MED.

11. General Public Link

Calls from the Public to the Town of Duxbury EOC regarding emergency concerns and questions are made to the Special Needs Staff via Rumor Control Officer using commercial telephone.

Communications between the Town EOC and the special needs population are accomplished using commercial telephone to arrange for necessary assistance.

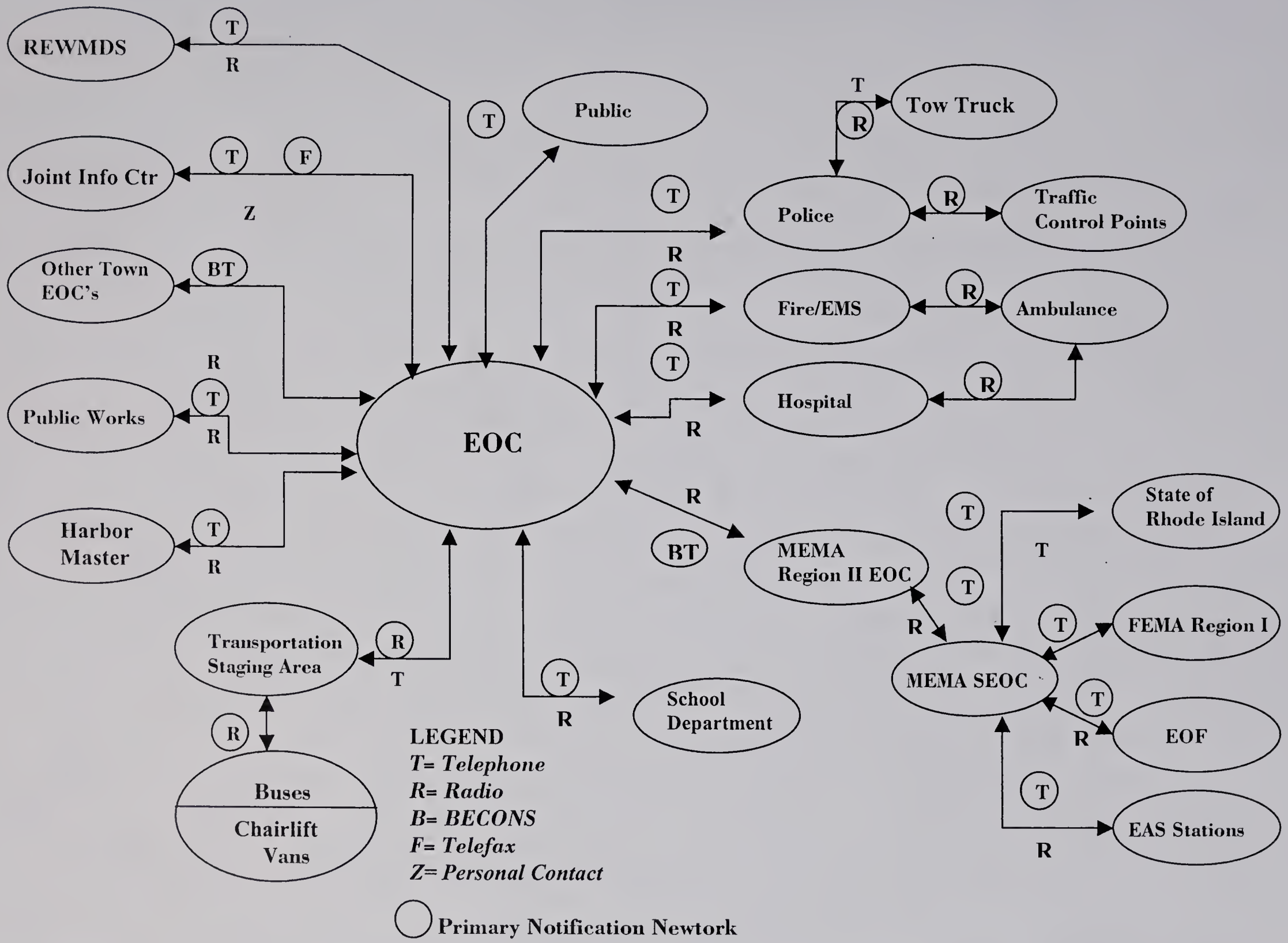
12. Field Monitoring Team Link

The Town of Duxbury does not perform radiological field monitoring, since this activity is a State function. Any communications with Field Monitoring Teams can be conducted through the MEMA Region II EOC, MEMA State, EOF, or MDPH Headquarters in Boston using radios with commercial telephone as a backup method. Information regarding Radiological Monitoring Operations is more fully described in the Resource Manual (p. 73) part of the Massachusetts Comprehensive Emergency Operations Plan.

13. Communications Network Testing and Maintenance

The readiness of the various components of the Town of Duxbury Communications Network is ensured through the periodic testing of communications equipment as described in Section II, Part N, of this Plan.

FIGURE F-1
Duxbury Communication Net



SECTION II FUNCTIONS

PART G - Public Information

1. Purpose

This part addresses provisions for informing the public and the news media on a periodic basis, and establishes guidelines for dissemination of accurate and timely news statements and public information for an emergency at the Pilgrim Nuclear Power Station (PNPS).

2. Concept of Operations

a. The Duxbury Board of Selectmen will ensure the information needs of the public and news media are being met.

b. The PIO will maintain contact with MEMA PIO at the Media Center.

c. Information from participating Town agencies in the EOC will be provided to the Public Information Officer. The PIO will provide information to the MEMA PIO at the Media Center for development of a joint news statement.

d. The PIO will obtain the Selectmen's approval on news statements affecting the Town of Duxbury prior to transmission to MEMA PIO at the Media Center.

e. To ensure accuracy and lessen the possibility of inaccurate information being disseminated, all news statements to include cable TV will originate from the Media Center and be coordinated among PIOs from other response organizations prior to release. The MEMA PIO will coordinate dissemination of information by town PIOs.

f. Prior to Media Center activation, news statements will be disseminated from the Duxbury Emergency Management Office located at Duxbury Central Fire Station. A member of the Board of Selectmen or Public Information Officer (PIO) will serve as spokesperson.

3. Media Center

a. The Media Center is located at the Entergy Industrial Park Training Center, Armstrong Road, Plymouth,MA.

b. The Media Center will be activated and staffed by State and Federal Agencies, and the Utility, upon declaration of an ALERT classification. Press briefings will be conducted jointly among the appropriate PIOs.

4. News Statements

At a minimum, news statements should contain the following information:

a. Date and time the news statement is being issued.

b. Statement number.

c. Identification of the agency/agencies issuing the statement.

d. Overview of Town response activities.

e. Geographical or jurisdictional areas involved.

f. Emergency Classification Level.

5. Rumor Control

Rumor control will be accomplished by publicizing a rumor control telephone number at the Duxbury EOC at the time of an emergency as well as publishing annually a Rumor Control telephone number in the Public Information Calendar. The Rumor Control Officer, a member of the Public Information Group of the Emergency Management Agency will be responsible for answering the rumor control telephone line, and answering only those rumors pertaining to Duxbury. Rumors not pertaining to the town of Duxbury will be referred to the appropriate Town, State, or utility rumor control line for information. The PIO will take action through news releases to clarify any information that is creating false rumors.

6. Media Orientation and Training

As part of a continuing education effort, respresentatives from Town, State, and Utility will participate in an annual media orientation program. The program will familiarize the news media with Town emergency response plans, health effects of radiation, official points of contact for release of information, and the need for accurate and timely reporting of information during an emergency.

7. Public Education

a. Contents of Public Information Materials

The production and distribution of public information materials on suggested actions to take in the event of an emergency involving PNPS is the joint responsibility of the Utility, Town and State. Public information materials contain:

(1) Information on means of notification.

(2) Proper response to notification.

(3) EAS station identifications.

(4) Protective measures.

(5) Subareas.

(6) Evacuation routes.

(7) Bus routes/pick-up points.

(8) Reception centers.

(9) Items to accompany evacuees.

(10) Provisions for mobility-impaired persons or other persons with special needs.

(11) Data on radiation.

(12) Points of contact for additional information.

b. Methods for Disseminating Public Information Materials

There are three (3) documents in the annual Emergency Public Information Program.

(1) Emergency Public Information Calendar

The Emergency Public Information Calendar is distributed annually by direct mail to residents within the 10-mile EPZ. The calendars include informational cards which can be filled out by individuals who need special assistance. A list of such individuals, e.g., hearing impaired, handicapped, or physically impaired, is maintained by the Duxbury Emergency Management Director.

(2) Emergency Public Information Placard

To ensure the transient population is made aware of emergency information, the Emergency Public Information Placard is posted in public and recreational areas such as parks, campgrounds, beaches, marinas and tourist attractions.

(3) Verizon Plymouth/Marshfield Area Telephone Directory

The Verizon Plymouth/Marshfield area telephone directory includes an emergency information notice for the permanent and transient population.

SECTION II - FUNCTIONS

PART H - EMERGENCY FACILITIES AND EQUIPMENT

1. Purpose

This part identifies facilities and equipment available to support the Town of Duxbury's response to an emergency at Pilgrim Nuclear Power Station (PNPS) and indicates the staffing requirements for the Duxbury Emergency Operations Center (EOC).

2. Duxbury EOC

The Town of Duxbury maintains an EOC located adjacent to the Duxbury Fire Department which is located at 668 Tremont Street, Duxbury, Massachusetts. The EOC serves as a 24-hour command and control headquarters for the Duxbury Emergency Management Agency, as well as the center for communications to local field units and to the MEMA SEOC and to the MEMA Region II EOC during emergency response activities.

a. Functions

During an emergency, the EOC is the central location for the coordination of all Town response activities, including coordination of appropriate actions for the protection of the public. The EOC is designed to provide adequate work areas for all members of the EOC staff. Informational and operational

data are posted and/or displayed on status boards and maps to enhance coordination among the various Duxbury response agencies.

b. Activation

The Emergency Management Director is responsible for EOC activation and operation. The EOC will be activated at the ALERT emergency classification level. Activation times will vary; however, full activation should occur within one hour.

c. Staffing

The EOC is fully staffed with appropriate personnel at the ALERT emergency classification level. A primary and a minimum of one alternate are assigned for each staff position to ensure continuous 24-hour per day operations for a protracted period. Lists of staff and assignments are contained in the Standard Operating Procedures. Following is a list of primary EOC groups.

(1) Executive Group

The Executive Group consists of the Duxbury Board of Selectmen, the Duxbury Emergency Management Director and the Duxbury PIO. The Executive Group will be the focal point for leadership, decision making, and coordination during an emergency response. Specific responsibilities are listed in Section II, Part A.

(2) Operations Group

The Operations Group consists of officials from the various Town Agencies who implement emergency response actions coordinated through the Duxbury Emergency Management Director. Each Town Agency has specific emergency responsibilities outlined in Section II, Part A, for which they have been adequately trained and equipped.

(3) Communications Group

The Communications Group is composed of radio operators from the various Town Agencies, along with Radio Amateur Civil Emergency Services (RACES) personnel. The Communications Group will interface between the field units and the operations group and will provide back up services in the event telephone systems fail or become overloaded. This group also routes radio messages through the support group.

(4) Public Information Group

The Public Information Group consists of the Public Information Officer and the Rumor Control Officer. This group works closely with the Executive Group to ensure that news statements are consistent with the Town status and that rumors are being addressed in a manner consistent with the Operations Group's response effort.

(5) Support Group

The Support Group consists of non-technical clerical workers including Documentation Unit personnel who work under the direction of the Emergency Management Director to provide support services to the other groups.

d. Facility Equipment

The Duxbury EOC is equipped with the necessary equipment to support continuous operation of the facility. Various categories of this equipment are shown in Figure H-1.

3. Other Town Facilities

In addition to the Duxbury EOC, the following Town facilities would be utilized to provide support to an emergency response:

a. Police Department (24-hour notification point/Public Safety Dispatch Center)
b. Central Fire Station (includes Fire/EMT and Route Alerting as required)
c. Highway Department Barn
d. School buildings (shelters)
e. Harbormaster Office
f. Old and new Town Hall (shelters)
g. Duxbury Free Library (shelter)

4. Radiological Equipment

a. EOC Emergency Management Radiological Monitoring Kits

Radiological instrument kits (CDV-777-1) have been distributed to the Duxbury Emergency Management Agency by the Massachusetts Emergency Management Agency (MEMA) and stored in the EOC. The instrumentation is inventoried, inspected, and operationally checked at least quarterly and after each use, and is calibrated at intervals recommended by the supplier or replaced on an annual basis by MEMA. A sufficient reserve of instrumentation is maintained at all times.

b. Dosimetry Kits (Packets)

Each agency has a dosimetry kit stored at the EOC which contains enough dosimetry for issuance to their emergency workers. Each agency's dosimetry coordinator will prepare dosimetry packets. Dosimetry packets are inventoried, inspected, and maintained by MEMA. Each packet contains:

1 Low-range DRD (0-200mR)

1 Mid-range DRD (0-20R)

1 DLR

1 Emergency Worker Exposure (EWE) Form

1 neck chain

1 Dosimetry Information Briefing Card

1 tablet of Potassium Iodide (KI). (Additional supplies of KI are stored at EOC and are available from Radiological Officer/Dosimetry Coordinator pending authorization of use by MDPH.)

NOTE: High-range (0-200R) direct-reading dosimeter, is not part of the standard dosimetry kits provided to response departments. A quantity of high-range DRDs are stored at the Duxbury EOC. High-range DRDs will be issued to individuals volunteering for lifesaving missions.

The distribution of PPE is directed and supplied by Duxbury Emergency Management Director.

c. Hospital Radiation Emergency Kit

All Medical Support (MS-1) hospitals have developed and maintain a Hospital Radiation Emergency Kit. (See Part L for a list of MS-1 Hospitals.)

d. Hospital Decontamination Kit

In addition to the Hospital Radiation Emergency Kit, the MS-1 Hospitals maintain a hospital decontamination kit.

e. Monitoring and Decontamination Kits

A monitoring and decontamination kit is located at the Regional Emergency Worker Monitoring and Decontamination Station.

5. Communications Equipment

Portable communications equipment is not stored in the EOC, but is used and maintained on a daily basis by each emergency response agency. Additional communications equipment is operationally checked by the communications group on a regular schedule. This equipment includes the DNN system, BECONS, RACES Communications Equipment, TTY, telecopier and other installed communications equipment at the EOC (see Section II, Part F for a detailed communications overview; and responsibilities for communications and warnings).

6. Emergency Supplies

The emergency response agencies involved with the Duxbury Radiological Emergency Response Plan (RERP) maintain their own emergency supplies and restock items as necessary.

7. Receipt and Coordination of Field Monitoring Data

The Town of Duxbury does not perform field radiological monitoring and thus has no provisions for a central location for the receipt and analysis of field monitoring data and the coordination of sample media; see the Resource Manual (p. 73) part of the Massachusetts Comprehensive Emergency Management Plan, (CEMP).

8. Alternate EOC

In the event that relocation of the Duxbury EOC may be necessary, alternate EOC facilities have been established at the MEMA Region II Complex, Massachusetts Correctional Institution, Bridgewater. Radio and telephone communications capabilities will be available for key Town response agencies.

FIGURE H-1

DUXBURY EOC

FACILITY EQUIPMENT

1. Communications Equipment

   a. Dedicated Notification Network (DNN) System

   b. BECON Radio System

   c. Telephone System

   d. Two-way Radio Communications (Base and Portable)

   e. RACES Radio Equipment

   f. TTY

   g. Telecopier

2. EAS Monitoring Equipment

   a. Television

   b. AM/FM Radio

   c. Tone Alert Radio

3. Map Boards

   a. 10-Mile EPZ

      - Sector with Sub-Areas

FIGURE H-1

DUXBURY EOC

FACILITY EQUIPMENT

(continued)

- Siren Locations
- Primary Evacuation Routes
- Public Shelters

b. 50 mile Ingestion Exposure Pathway Map

c. Detailed Town Map (with traffic control/access control points)

4. Status Boards

a. Significant Events Board

b. Emergency Classification

c. EOC Staff Sign-in

5. Office Equipment/Furniture

a. Desks

b. Tables

c. Chairs

d. Photocopier

FIGURE H-1

DUXBURY EOC

FACILITY EQUIPMENT

(continued)

e. Telecopier

f. 24-hour Clocks

g. Computer

6. Miscellaneous Items

a. Kitchen Equipment

b. Emergency Generator

c. Sanitary Facilities

d. Standard Office Supplies

e. EOC Staff Supplies and Equipment

SECTION II - FUNCTIONS

PART I - Accident Assessment

1. Purpose

This part describes the accident assessment and radiological monitoring activities in the 10-mile Emergency Planning Zone (EPZ).

2. Radiological Monitoring - Accident Assessment

a. Accident assessment activities are accomplished independently by the Utility and the State.

The Massachusetts Department of Public Health (MDPH) has the primary responsibility for assessing an accident from a public health perspective. The action arm for MDPH is the Nuclear Incident Advisory Team (NIAT). NIAT consists of members who are MDPH employees trained in monitoring and sampling procedures. In addition, NIAT draws upon the expertise of a battery of identified specialists in various fields and disciplines associated with nuclear materials. NIAT has prepared a handbook, in conjunction with the Radiological Emergency Response Plan, which in turn is part of the Massachusetts Comprehensive Emergency Management Plan.

b. The NIAT Handbook specifies State monitoring team operations and equipment including:

(1) Notification and Team Activation

Upon receipt of the notification call from MEMA, MDPH will contact the PNPS Control Room to verify the emergency situation and obtain additional information. If the emergency classification is at the ALERT or higher level, MDPH will activate NIAT, using an established call-down procedure.

(2) Vehicles and Communications Equipment

Radio-equipped sedans are available for use by team members. The radios allow communications between the field teams, MEMA SEOC, MEMA Region II EOC (Bridgewater), MDPH Headquarters (Boston), and PNPS EOF (Plymouth).

(3) Radiological Monitoring Kits

All NIAT members have survey instruments capable of measuring alpha, beta and gamma radiation. In addition, they have a portable air sampler with battery clips and kits containing materials necessary for isolation of contaminated materials.

The capability exists to detect and measure radioiodine concentrations as low as 10-7 uCi/cc (microcuries per cubic centimeters) under field conditions. The teams are also supplied with ingestion pathway sampling kits which contain equipment necessary for the collection of environmental samples (soil, water, vegetation, etc.).

(4) Deployment Times

Travel times for the initial NIAT responders from the point of origin to the staging area at the PNPS EOF is dependent upon the time of day due to traffic congestion. An estimation of deployment time is between one to three hours.

In the event of poor road conditions at the time of an emergency, transportation by air may be available through the Massachusetts State Police and the Civil Air Patrol.

c. Teams will proceed to the Utility's EOF and report to the MDPH/NIAT Environmental Emergency Team Coordinator for a situation briefing. Teams will be dispatched to preselected field monitoring locations from the EOF to gather air, water, soil, and vegetation samples and dose rate information. All field radiological data will be evaluated at the EOF by MDPH personnel and translated to actual and projected doses from which integrated dose estimates

will be made. Equipment and personnel are available at the EOF to perform initial analysis of air sample filters and swipes. All field samples will be delivered to MDPH personnel at the EOF for transport to the laboratory for analysis. Primary location for laboratory analysis is the MDPH Jamaica Plain laboratories, and those laboratories listed in the New England Interstate Radiation Assistance Plan.

d. Aerial support for tracking the centerline of the plume will be provided by the Federal Government, upon request by MDPH.

e. Protective action recommendations are made independently by Utility and MDPH/NIAT personnel at the EOF. Upon agreement between MDPH and MEMA, a recommendation will be relayed to MEMA SEOC, Framingham, for a protective action decision. Once a protective action is ordered by the Governor through the MEMA Director, it is the responsibility of local jurisdictions to implement it.

SECTION II - FUNCTIONS

PART J - PROTECTIVE RESPONSE

1. Purpose

This part identifies the basis for decisions regarding protective actions to the public, the implementation of those protective actions, and the provisions made for continued protection and care of evacuees.

2. Protective Action Decision-Making

a. The Governor of Massachusetts has ultimate responsibility and will make the final decision on protective actions directives in consultation with the Massachusetts Emergency Management Agency (MEMA) Director, and the Massachusetts Department of Public Health (MDPH). MEMA Director and the MDPH will base their recommendations on federal protective action guides, radiological data, plant parameters and local conditions. The decision-making process involves comparing the benefits to be gained versus risks and constraints that might result from each particular action under consideration. The Duxbury Board of Selectmen is responsible for the implementation of Protective Action Directives issued by MEMA for the affected public.

b. When a protective action has been directed by the Governor, MEMA will notify the Town of Duxbury of the Protective Action Directives and affected subarea(s), EAS message to be broadcast and the time when the sirens will be activated. This notification will take place via the BECONS Radio Network and will occur within a timely manner from the time the Governor of Massachusetts or his designee has made a Protective Action Directive. Copies of EAS messages will be telefaxed to EPZ towns from MEMA SEOC.

c. The town of Duxbury may also choose to utilize the MNS to notify residents of the protection action.

d. The Commonwealth of Massachusetts will be guided by protective action guides established by the Environmental Protection Agency (EPA), U.S. Health and Human Services and the U.S. Food and Drug Administration for the ingestion of food, water, and milk. The Massachusetts Department of Health will coordinate these activities.

e. Some of the variables that may influence decision-making regarding protective actions for the 10-mile EPZ are:

(1) Plant Conditions

(2) Projected radiation dose.

(3) Measured radiation dose.

(4) Portion of the EPZ affected.

(5) Time available in which an action could be taken to significantly reduce radiation doses.

(6) Radiation dose pathway.

(7) Available resources.

(8) Local weather or road conditions.

f. Some of the data needed for consideration of the above variables will be collected by State, Federal, and Utility field monitoring teams at pre-selected radiological sampling and monitoring points. (See Figure J-1, for a map of State pre-selected points.). The Town has no field monitoring capability.

g. The Town of Duxbury will provide information on local conditions to the MEMA State EOC through MEMA Region II. This information may include weather and road conditions, resource availability, major local events and any other constraints. The State will consider this information when making a protective action decision. The Town will update this information, as necessary.

3. Protective Actions

Sheltering and evacuation are the two primary protective actions for the general public within the plume exposure pathway. Other available protective measures designed to support or supplement these two protective actions include access control, ad hoc respiratory protection and radioprotective drugs for the public school children, staff, individuals in public shelters and institutionalized population.

Areas in close proximity to and downwind from PNPS are more likely to be affected by a release; therefore, the 10-mile EPZ has been divided into subareas, so that protective actions may be taken in the particular part of the EPZ affected by a release. (See Figure J-2, for map of EPZ and its subareas). Furthermore, protective actions may be used in combination with one another.

In order to implement protective actions, resources beyond what are available on a daily basis may be needed. In addition to resources provided through letters of agreement, additional assistance, and the authority for making it available, are provided through a "Declaration of Emergency" made first by Town Selectmen and then by the Governor.

The various actions available to protect the public in the plume exposure pathway are described below.

a. Sheltering

Sheltering may be the appropriate protective action for the rapid passage of a plume, or when weather and/or road conditions indicate that sheltering would be safer than evacuation. Most year-round homes and buildings in the 10-mile EPZ are insulated and could provide sufficient protection and shelter against direct and inhalation exposure. If sheltering is the protective action selected, the public, will be instructed to do the following:

(1) Remain indoors with ventilation systems turned off and doors and windows closed.

(2) Continue to monitor local radio/television stations for further EAS instructions/information.

(3) If traveling in a vehicle, close windows, air circulation systems and vents and proceed out of the EPZ or seek more permanent shelter.

(4) Use PPE as directed and supplied by Duxbury Emergency Management Director.

b. Evacuation

(1) Evacuation is the appropriate protective action for releases of long duration or high intensity. If evacuation is the selected protective action, residents will be instructed to leave the affected subarea(s) and, if radiological monitoring or lodging is needed, the public will be directed to

report to Braintree Reception Center located beyond the 10-mile EPZ boundary. At the reception center, the evacuees will be monitored for contamination, decontaminated (if necessary) and registered. Those evacuees who require lodging will be assigned to a mass care shelter. Most of the evacuating population will travel in their own vehicles, driving out of the EPZ using designated evacuation routes. (See Figure J-3, for a map of evacuation routes.)

(2) Should conditions warrant evacuation of PNPS, onsite personnel will be directed to evacuate via personal vehicle to one of the Utility-owned offsite Assembly Areas. The Offsite Assembly Area will be chosen on the basis of wind direction and whether or not a release is in progress.

c. Access Control

Access control consists of the establishment of barriers and/or the assignment of personnel to restrict access to all or part of the 10-mile EPZ.

At the ALERT classification level, recreational areas and major events will be closed to the public. Primary points of entry to recreational areas and major events will be controlled to restrict access to a closed area.

Access control will be used in conjunction with sheltering and evacuation protective actions. Access control can be highly effective in preventing the exposure of persons by preventing them from traveling through the EPZ. It is also an effective means of reducing traffic congestion on key roadways and for

providing security for evacuated areas. Those points necessary to control access into an affected area will be activated.

The Massachusetts State Police coordinates access control activities. Personnel from Massachusetts State Police Troop D, Plymouth County Sheriff's Department, and local police departments will staff access control points. The Massachusetts Department of Transportation and local public works departments will provide the necessary equipment to support access control. Access to an affected area will be controlled until re-entry of the public is authorized. The Massachusetts National Guard will support access control by providing relief personnel. The U.S. Coast Guard, with assistance from town Harbormasters, will control access into the portion of Cape Cod Bay within the 10-mile EPZ.

The MEMA SEOC will contact appropriate authorities to restrict air and rail traffic.

d. Ad Hoc Respiratory Protection

Respiratory protection may be recommended on an ad hoc basis. This can be accomplished by placing a cotton handkerchief or wash cloth over the nose and mouth. Ad hoc respiratory protection can increase the effectiveness of sheltering by reducing inhalation exposure. It could also be used during an evacuation if the public must, at any time, pass through a radioactive plume.

The Massachusetts Department of Public Health is responsible for recommending ad hoc respiratory protection, if warranted. The public would be

advised over EAS stations of the need for ad hoc respiratory protection and how it is to be improvised.

e. Radioprotective Drugs

Potassium Iodide (KI), the most commonly used thyroid-blocking agent, saturates the thyroid gland with non-radioactive iodine, which blocks the uptake of radioactive iodine

Potassium Iodide (KI) has been made available by the Massachusetts Department of Public Health to members of the general public within the Emergency Planning Zone. Additional information on the use of KI by the general public is included in the Massachusetts Radiological Emergency Response Plan.

Town of Duxbury has made a policy decision that KI will be available to students with parental consent, staff at public schools, and all evacuees in town shelters.

KI may be administered to nursing home patients whose immediate evacuation, as determined by their attending medical officials, would be life threatening. KI may also be provided to facility staff who would remain to care for these patients. An adequate supply of KI for patients and staff is stored at the nursing homes.

The MDPH commissioner or designee may recommend use of KI as a precautionary measure when the dose to the thyroid is projected to exceed MDPH guidelines.

4. Sheltering and Evacuation of Special Populations

Most of the population in the 10-mile EPZ have the capability and the resources needed to implement protective actions. Special Populations, however, require assistance in taking protective action. This Special Population consists of transportation dependent persons, mobility impaired, persons in recreational areas, workers for major employers and persons in special facilities. The appropriate officer in the EOC will coordinate the protective response for their respective special population group.

In the event of sheltering, members of the Special Population who are residents or normally work in the EPZ will shelter in their own home or workplace in the same manner as the general public. Public shelters have been established for those individuals within the EPZ who may require assistance in sheltering (e.g., tourist). These shelters and their capacities are identified in the Duxbury Shelter Program Summary and in the standard operating procedures, which support the plan.

In the event of an evacuation, most members of the Special Population, particularly persons in recreational areas, will travel out of the EPZ using their own vehicles. Others will require transportation assistance. The appropriate officer in the EOC will contact staff at special population sites to determine the number of persons requiring transportation assistance. Transportation needs will be met to the extent possible with local resources used on a daily basis. Each officer in the EOC will report additional resource needs to the Town Transportation Officer who will obtain supplemental transportation resources through MEMA Region II.

Adequate supplemental transportation resources (vehicles and drivers) have been identified. Private bus companies within an approximate 40-mile radius of PNPS will supplement buses and drivers already under contract to the Town, such as school buses and drivers. MEMA maintains Letters of Agreement (LOA's) with a sufficient number of private bus companies for enough buses and drivers to evacuate persons without transportation in a single trip. Private ambulance companies within an approximate 40-mile radius of PNPS will transport persons who are without transportation means and unable to ride in a bus. MEMA maintains agreements with a sufficient number of private ambulance companies to provide enough ambulances with crew to evacuate ambulance dependent persons in a single trip. Agreements with bus providers and ambulance providers are part of the MEMA Region II Plan.

Supplemental school bus resources will be dispatched by MEMA directly to school buildings. All other supplemental transportation resources will be assembled at Transportation Staging Areas. There are four Transportation Staging Areas designated for the PNPS plume EPZ. The Transportation Staging Area for the Town of Duxbury is the Martinson Elementary School located in Marshfield.

The Staging Area will be staffed by volunteers who will maintain radio communications with the EOC. In an evacuation, ambulances will be dispatched by staging area personnel to special facilities, and private homes as needed. Buses will be dispatched to special facilities, homes, and planned bus routes throughout the Town for those without personal transportation.

a. Transportation Dependent

Generally, transportation dependent persons will be notified of a protective action in the same manner as the general public. If evacuation is directed, they will be instructed through EAS to go to a pickup point or bus route for transportation to the reception center. Those unable to get a route are considered "mobility-impaired" and will be picked up at their homes

b. Mobility Impaired

A list of persons with special needs (including mobility impaired) is on file with the Town Emergency Management Agency for use in an emergency. The special needs list will be updated at least annually as part of the Emergency Public Information Calendar which is mailed directly to homes within the 10-mile EPZ. The brochure contains a postpaid mail-in card requesting information on specific needs that require special attention during an emergency. The cards are pre-addressed to the MEMA Region II Manager who will ensure the cards are distributed to the Duxbury Emergency Management Director, who is authorized to maintain the confidential information.

At the time of the emergency, the Special Needs Representative will verify transportation requirements of those on the special needs list. At the time transportation needs are being verified, mobility impaired persons will be told to tune to an EAS station for emergency information. If a protective action is directed, they will be notified through EAS.

If evacuation is directed, mobility impaired persons will be picked up at their homes. Those able to ride in a bus will be transported to the reception center. Those requiring ambulance transportation will be taken to a hospital for care in a host community.

Mobility impaired persons who are institutionalized are discussed under Special Facilities.

c. Recreational Areas

Recreational areas including major events will be closed at the ALERT classification; however, in the event of a rapidly escalating incident, provisions have been made for the protection of the public in these areas.

Persons in recreational areas will be notified of the closing or protective action through route alerting and staff announcements. Managers of recreational areas will be notified by appropriate officers in the EOC.

If sheltering is directed, persons in recreational areas will be informed to take shelter in a public building, such as a Town building. There is adequate public shelter space in close proximity to recreational areas to accommodate this population group. The Shelter Officer in the EOC will request shelter owners/managers to prepare their buildings for use and receive persons in need of public shelter. Route alerting personnel and recreational area staff will direct this population to the shelters. Some EPZ residents at recreational areas may choose to shelter in their own homes instead of a public shelter.

If evacuation is directed, persons in recreational areas will be informed to evacuate. If radiological monitoring for contamination or if lodging is needed they will be directed to report to the reception center.

(1) Boaters

Boaters will be advised of a protective action by the Harbormaster's staff and U.S. Coast Guard personnel. The Harbormaster will coordinate with the U.S. Coast Guard to ensure boaters are advised of protective action directives.

If a protective action is directed, boaters will be instructed to return to their launch sites or leave the area to the north. Boaters returning to Duxbury will receive further instructions from Harbormaster and Police personnel.

If evacuation is directed, most boaters will travel out of the area in their own vehicles using evacuation routes. Those in need of transportation will be directed to a bus route.

(2) Beaches and Ponds

The beach and pond population will be advised of a protective action by route alert teams from the Police and/or Harbormaster departments and through the prompt notification system for the public.

The Police Operations Officer in the EOC will coordinate with the Harbormaster to ensure the beach and pond population are advised of the protective actions.

If evacuation is directed, most of the beach and pond population will travel out of the area using their own vehicles. Those in need of transportation will be directed to a pickup point or bus route.

(3) Historic Sites

Visitors at historic sites will be advised of a protective action by the managers. The Special Facilities Coordinator in the EOC will notify historic site managers of a protective action.

If sheltering is directed, most visitors will shelter at the historic site or will be directed to a public shelter.

If evacuation is directed, most visitors will travel out of the EPZ using their own vehicles. Those in need of transportation will be directed to a pickup point or bus route.

(4) Parks

Visitors at parks will be advised of a protective action by route alert teams and the prompt notification system for the public.

If evacuation is directed, most visitors at parks will travel out of the EPZ using their own vehicles. Those in need of transportation will be directed to a pickup point or bus route.

d. Major Employers

Workers for major employers will be notified of an emergency by their employer. The Special Facilities Coordinator will notify major employers of the emergency and advise them to tune to an EAS station. Employers and workers will be notified of a protective action through the prompt notification system for the public. Major Employers have been provided tone Alert radios.

If sheltering is directed, workers will be advised to shelter in their workplace.

If evacuation is directed, workers will be informed through EAS to evacuate. If radiological monitoring or lodging is needed, they will be directed to report to the reception center.

Most workers will travel out of the EPZ using their own vehicles. Those in need of transportation will be directed to a pickup point or bus route.

e. Special Facilities

Administrators of special facilities will ensure that appropriate protective actions are taken for persons in their care. Administrators will be notified of the emergency and protective action directives by appropriate officers in the EOC.

In addition, administrators will be notified through Tone Alert Monitors activated by the EAS Station.

If sheltering is directed, this special population will be sheltered at their facility. Staff will prepare the facility for use in sheltering.

If evacuation is directed, this special population will be picked up at their facility and transported by bus, lift van, or ambulance to a host facility at least 5 miles beyond the 10-mile EPZ boundary.

(1) Schools, Day Care Centers and Children's Camps

Children at schools, day care centers, private schools, and camps will receive special consideration during an emergency at PNPS. At the ALERT classification level, buses will park in front of EPZ schools and camps in preparation for a precautionary transfer of children to Braintree High School.

KI will be distributed to public school children at the Alert Classification Level by school personnel if the release of radioactive materials is imminent.

An adequate number of buses have been identified to transport the children in a single trip. In the event of a rapidly escalating incident in which evacuation is required, provisions have been made for the protection of children at schools and camps by directing them to reception centers for monitoring prior to relocation to Braintree High School.

(a) Schools, Nursery and Day Care Centers

The School Superintendent in the EOC will notify school principals and administrators while the Health EOC Representative will notify nursery, day care, and private school administrators of the emergency and protective action directives. Principals and administrators will then notify their staff. Schools in the Town of Duxbury are listed in Figure J-4.

Any student not picked up by 8:00 p.m. will be assigned to a Mass Care Shelter. School staff will remain with students until parental pickup is completed. Schools located outside the EPZ will be notified by the School EOC Representative and MEMA Region II Special Facilities Coordinator to retain students for parental pick-up.

(b) Children's Camps

The Special facilities Coordinator will notify camp directors of the emergency and protective action directives. Children not picked up by parents by 8:00 PM will be assigned to a Mass Care Shelter. Camp staff will remain with children until parental pickup is completed.

(2) Health Care Facilities

The Special Facilities Coordinator in the EOC will notify health care facility administrators of the emergency and protective action directives.

If evacuation is directed, most patients and residents of health care facilities will be transported by bus to a host facility. Patients unable to ride on a bus will be transported by lift van or ambulance to a hospital or nursing home. The host facilities have been selected on the basis of their ability to offer an appropriate minimum level of care for the relocated patients or residents.

(3) Detention Center (Town Jail)

Duxbury Police Department will ensure that appropriate protection actions are taken for the inmates in their facility and will also be notified of the emergency and protective action directives.

If evacuation is directive, inmates will be transported to a host detention center. Appropriate security measures will be taken during relocation of inmates.

5. Evacuation Route Capacities

Roads within the 10-mile EPZ have been evaluated to determine their capability to handle traffic. Route capacity, i.e., the maximum hourly rate at which vehicles can travel past a point in the road, is identified in The Pilgrim Station Evacuation Time Estimate Study, Appendix N.

6. Traffic Control

a. Traffic control points will be activated according to priority and as needed. Additional traffic control will be provided, as necessary, to ensure adequate traffic flow for evacuation.

b. Major traffic intersections will be controlled by the Duxbury Police Department with support from the Massachusetts State Police, Troop-D, and the Plymouth County Sheriff's Office and other local police departments.

c. Duxbury Police Department will coordinate traffic control with Massachusetts State Police, Troop-D, at the MEMA Region II EOC. If additional assistance is needed to perform traffic control, it will be requested from MEMA Region II.

7. Impediment Removal

a. The Duxbury Department of Public Works, in conjunction with the Massachusetts Department of Transportation, will provide resources needed to clear roads of impediments, such as snow or fallen trees. The Public Works Department maintains a listing of equipment used in road impediment removal for any emergency.

b. Stalled vehicles restricting evacuation routes will be removed through local police department means (i.e., wrecker providers) or Town or Mass. Highway personnel pushing the disabled vehicles off the road.

c. If assistance is required for clearing roads or removing stalled vehicles, it will be requested from MEMA Region II.

8. EPZ Population

Population figures for three major population groups within the 10-mile EPZ have been determined.

9. Evacuation Time Estimates

Estimates of the time it would take to evacuate the 10-mile EPZ or portions of it have been made. Estimated mobilization times for transportation providers are referenced in the MEMA Region II plan.

10. Potential Problems in Evacuation

a. The Town of Duxbury has a past history of fog, severe snow storms, ice, and hurricanes due to its geographical location near the Atlantic Ocean. The Commonwealth of Massachusetts will take into consideration visibility, road conditions, high winds, etc., when making Protective Action Directives.

b. Smooth traffic flow out of the EPZ could be a problem due to the large number of tourists traveling to and from the Cape Cod Region on Route 3. In the event of an emergency at PNPS, traffic from Boston to Cape Cod may be diverted from Route 3 to Route 128/I-93. Boston-Cape Cod diversion routes (I-93/Route 128, I-95, I-495/Route 25, Route 6) offer travelers a path around the 10-mile EPZ along major, limited-access routes. In reverse, traffic from Cape Cod to

Boston may be diverted from Route 3 to Route 6 from Sagamore Bridge to the Bourne Bridge, onto I-495/25.

c. Some traffic congestion may be caused by disabled vehicles; therefore, provisions have been made in this plan for removing impediments, such as disabled vehicles.

d. Clark's Island and Saquish Neck fall within the political jurisdiction of Plymouth. However these are geographically close to Duxbury. In fact, land access to Saquish Neck is only through Duxbury Beach. During a Radiological Emergency, Saquish residents will leave the area via Duxbury Beach. This exit would impact Duxbury's Emergency Management resources. Duxbury's Police Department and Harbormaster will assist and coordinate with Plymouth Harbormaster to ensure the health and safety of these residents.

As a precautionary measure, these residents will be asked to leave the area at the Alert emergency classification. Residents of Saquish and Clark's Island will be notified of a Protective action directive through the prompt notification system (sirens) and by route alerting from the Plymouth and Duxbury Emergency Management. If sheltering is directed, residents will shelter in their own homes. If evacuation is directed, residents and visitors will travel out of the area using their own vehicles or boats and provide a ride to those without transportation.

e. Evacuation by vehicle off Duxbury Beach can be accomplished either by way of Marshfield or through Duxbury by way of the Powder Point Bridge. If access is

restricted at the bridge due to some unknown circumstance, then all traffic will leave Duxbury Beach by traveling north on Route 139 thru Marshfield.

11. Security Patrols

Security will be provided for evacuated areas. Patrols will be limited to areas where radiation levels are acceptable for emergency worker activities. MDPH will identify areas not to be entered and inform the Town of Duxbury of these areas through MEMA Region II.

The Duxbury Police Department, supported by the Plymouth County Sheriff's Office, the Massachusetts State Police Troop-D, and the Massachusetts National Guard, will provide security patrols for evacuated areas until the majority of the residents have returned.

12. Reception Center

a. Braintree Reception Center, will be available to monitor, decontaminate (if necessary) and register evacuees. If lodging is needed, evacuees will be assigned to mass care centers.

b. Braintree High School will serve as a reception center for residents and transients from Duxbury. Braintree High School will also serve as the reception center for school and camp population who are transferred out of the EPZ from the same area in a rapidly escalating incident.

c. Volunteers will provide monitoring for evacuees and perform decontamination, as necessary. Sufficient trained personnel and equipment are available to monitor and register evacuees (resident and transient) from the 10-mile EPZ within 12 hours after evacuees arrive at the reception center.

d. State and local Police will provide traffic control, security, and law and order at the Braintree Reception Center.

e. The Braintree Reception Center Plan and Standard Operating Procedures provide details on reception, mass care, monitoring and decontamination of evacuees.

13. Mass Care Shelters

Mass care shelters for evacuees will be set up in schools. There is adequate space to house at least twenty percent of the evacuating population. Mass care shelters will be activated, as needed, and will be operated under the direction of the American Red Cross.

a. If personal transportation between the reception center and mass care shelters is not available, bus transportation will be provided.

b. Mass. State Police personnel along with the support of local police departments will provide traffic control, security, and law and order at the mass care shelters.

c. Amateur radio personnel in the host community will provide communications support from mass care shelters to other sites, including the reception center,

other mass care shelters, and the EOC. Mass care shelters are able to communicate by radio to designated hospital and ambulance services through the EOC.

d. American Red Cross personnel will be available to provide emergency medical services and referrals.

14. Ingestion Exposure Pathway Protective Measures

Ingestion Exposure Pathway protective measures involve controlling food, water, milk and livestock feed supplies which may have become contaminated within the Ingestion Exposure Pathway. These measures are designed to keep radioactive material out of the human food chain.

Recommendation for the Ingestion Exposure Pathway EPZ will be based on plant conditions and/or field samples. The Massachusetts Department of Public Health coordinates the collection and analysis of food, water and milk samples. Protective action will be based on Department of Health Education, and Welfare/Food and Drug Administration criteria. Local Communities will assist state agency implementation of protective action, as requested.

FIGURE J-1

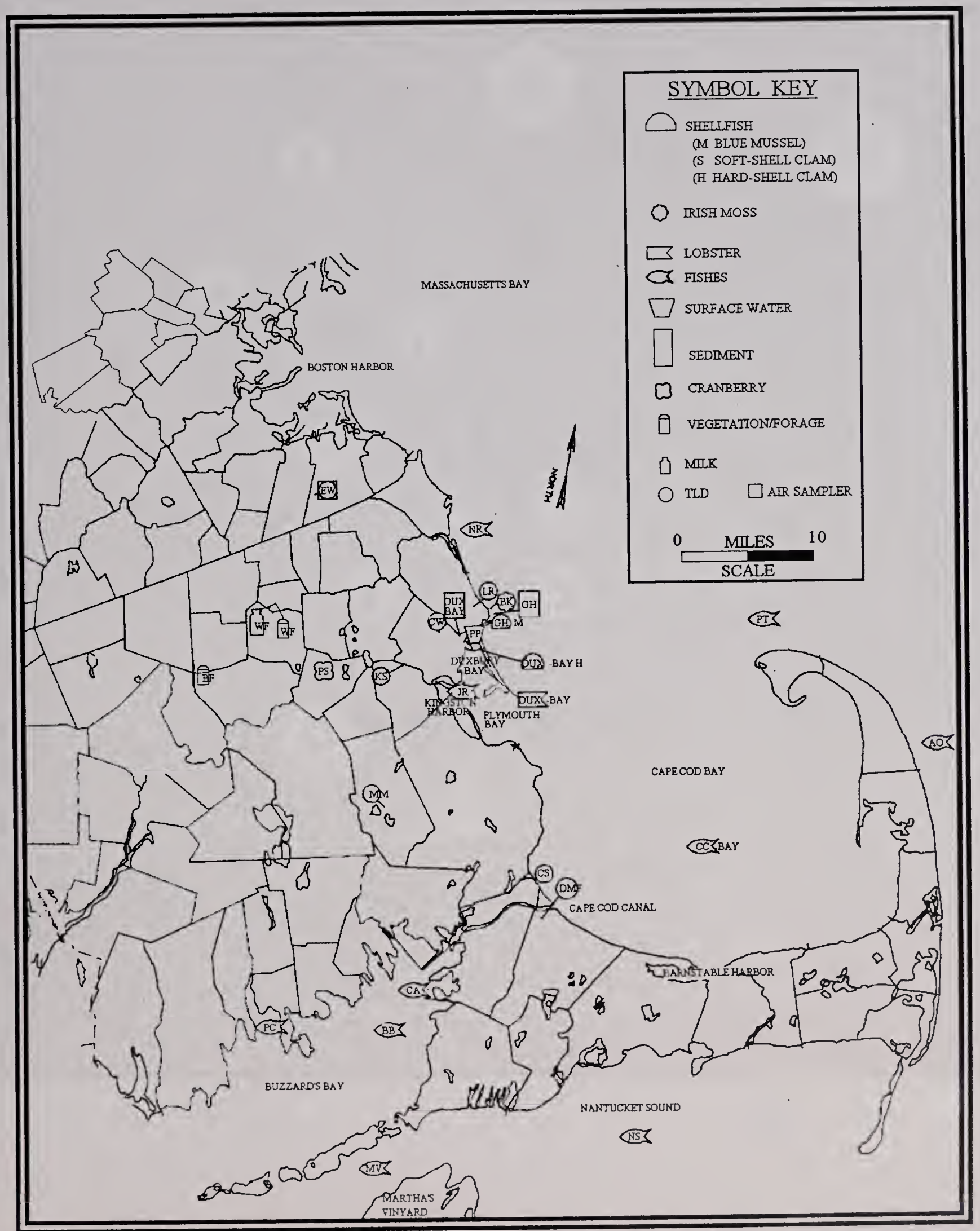

SYMBOL KEY
SHELLFISH
(M BLUE MUSSEL)
(S SOFT-SHELL CLAM)
(H HARD-SHELL CLAM)
IRISH MOSS
LOBSTER
FISHES
SURFACE WATER
SEDIMENT
CRANBERRY
VEGETATION/FORAGE
MILK
TLD
AIR SAMPLER
0 MILES 10
SCALE
MASSACHUSETTS BAY
BOSTON HARBOR
HUDSON
EW
NR
LR
BK
GH
DUX BAY
CW
GH
M
PP
DUXBURY BAY
DUX BAY H
JR
KINGSTON HARBOR
DUX BAY
PLYMOUTH BAY
WF
WF
BF
PS
KS
PT
AO
CAPE COD BAY
MM
CC BAY
CS
DM
CAPE COD CANAL
BARNSTABLE HARBOR
CA
PC
BB
BUZZARD'S BAY
NANTUCKET SOUND
NS
MV
MARTHA'S VINYARD

FIGURE J-2
10 - Mile EPZ with Subareas

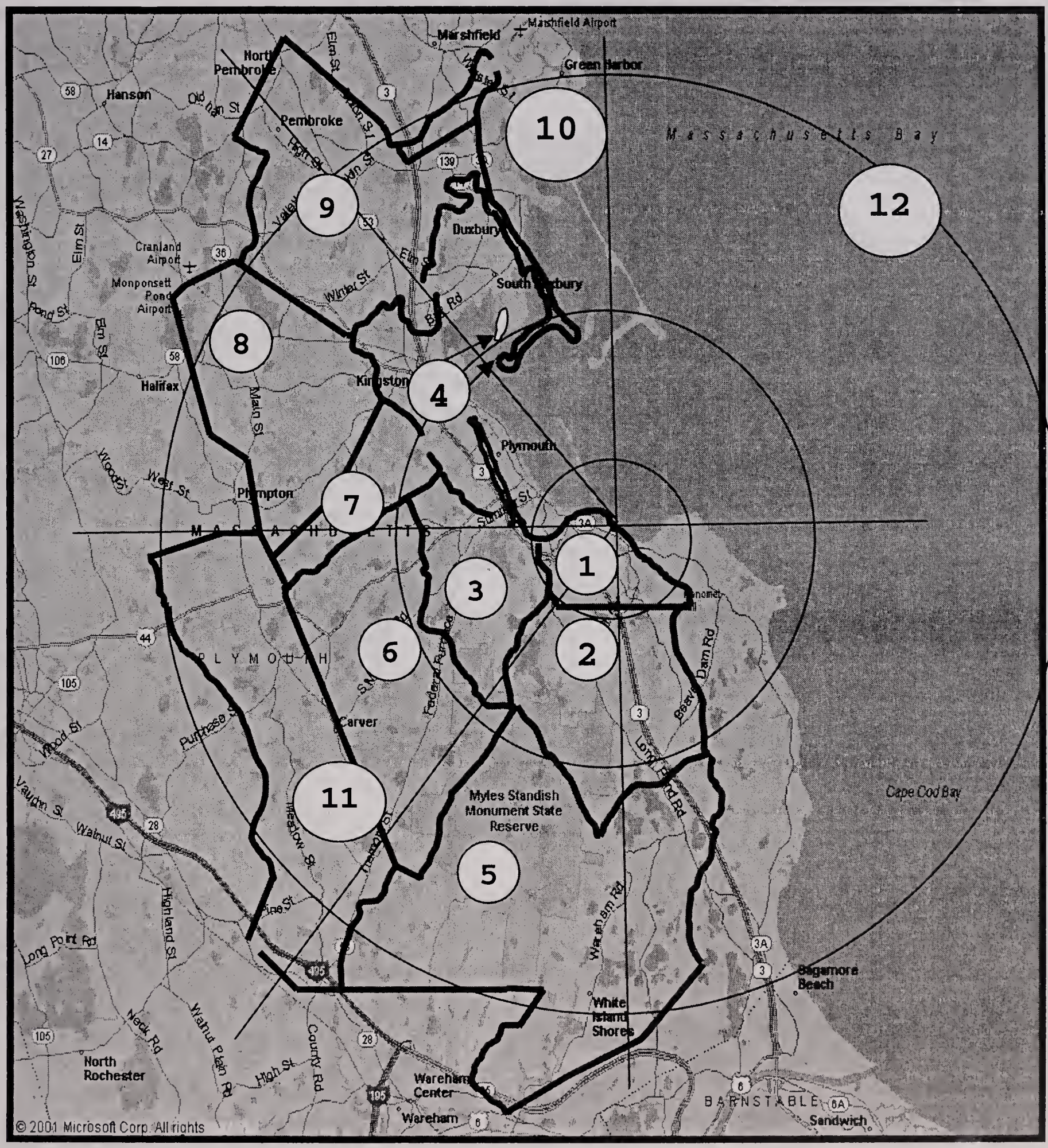


Figure J-3
Evacuation Routes

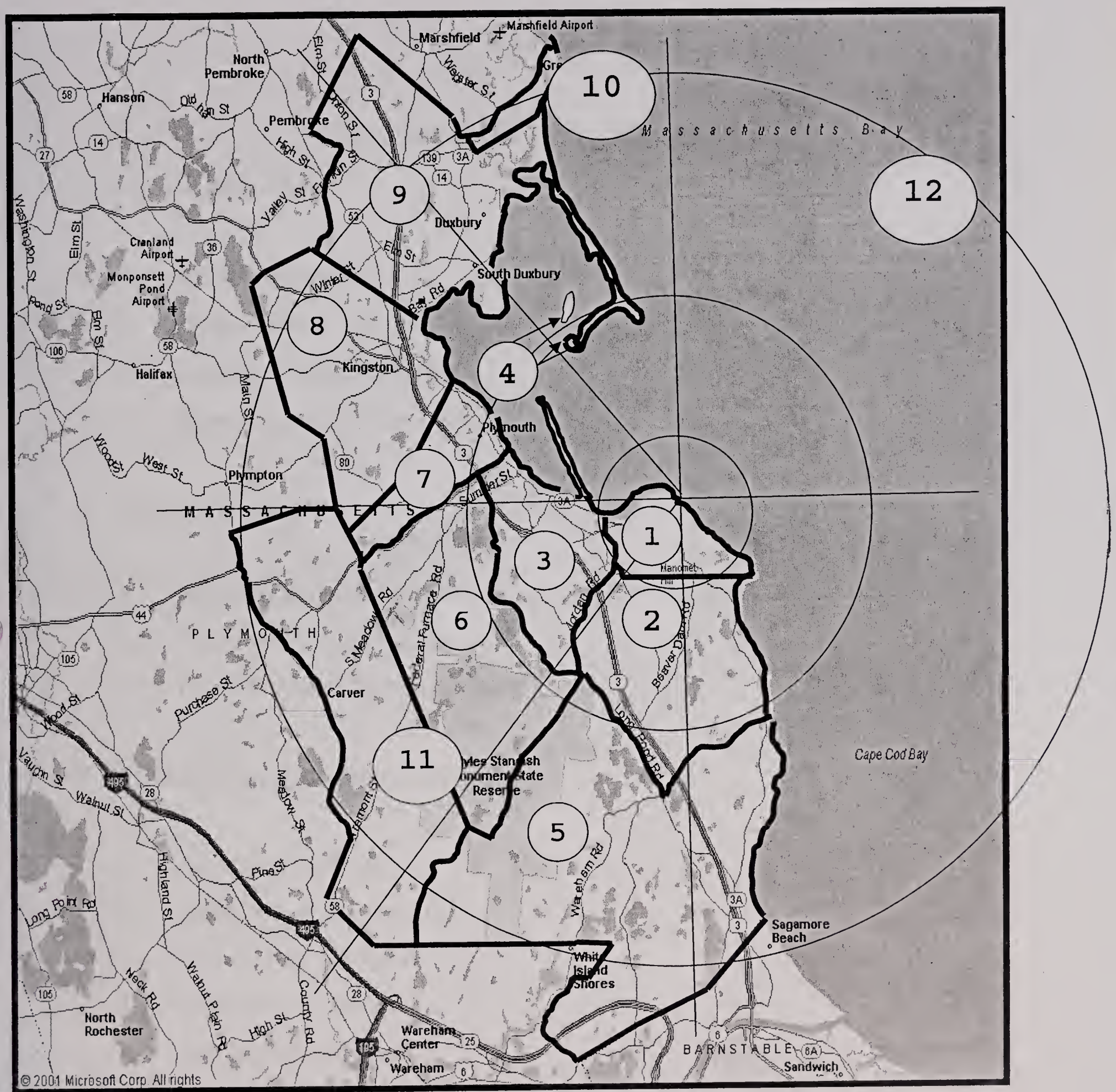


FIGURE J-4

SCHOOLS IN THE TOWN OF DUXBURY

A. PUBLIC SCHOOLS

1. Duxbury High School
2. Duxbury Middle School
3. Chandler Elementary School
4. Alden Elementary School

B. PRIVATE SCHOOLS

1. Bay Farm Montessori Academy
2. Duxbury Bay Maritime School
3. Good Shepherd Christian Academy

C. NURSERY AND DAY CARE CENTERS

1. Berrybrook Preschool
2. Magic Dragon Children's Center
3. Learn in Play Pre-School
4. Pied Piper Pre-School
5. Pilgrim Day Child Care
6. Discovery Corner Preschool
7. Blue River Montessori School
8. Elements Montessori
9. Pilgrim Area Collaborative

PART K - RADIOLOGICAL EXPOSURE CONTROL

1. Purpose

This part describes exposure control for emergency personnel, contamination monitoring and decontamination of personnel and equipment, radioactive material control, and radioactive waste disposal.

2. Equipment

a. A personal dosimetry packet is issued to each emergency worker performing an emergency function inside the 10-mile Emergency Planning Zone (EPZ). Packets are stored at the Duxbury EOC. At the ALERT classification, each Agency Dosimetry Coordinator obtains his/her agency's allocation. Sufficient dosimeters are available to supply each emergency worker with a packet. Additional supplies are available from MEMA Region II. Each dosimetry packet contains the following:

(1) Two self-reading dosimeters (DRDs)

(a) One low-range (0-200mR) Direct-Reading Dosimeter (DRD)

(b) One mid-range (0-20R) Direct-Reading Dosimeter (DRD)

(2) One Dosimetry Life Record (DLR)

(3) One Emergency Worker Exposure (EWE) Form with instructions.

(4) One Neck Chain.

(5) One 130mg tablet of Potassium Iodide. (KI)

(6) One KI Instruction Sheet

(7) Dosimetry Instruction Briefing Card

NOTE:

- Agency Dosimetry Coordinators distribute packets to individual emergency workers within their organization. Sufficient quantities of KI are retained by the Radiological Officer/Dosimetry Coordinators to provide each emergency worker with a 10 day supply, the additional KI would be distributed to emergency workers at the direction of Mass. Department of Public Health (MDPH).

- High-range (200R direct-reading dosimeter) is not part of the standard Dosimetry Kits provided to response departments. A quantity of High-range DRDs are stored at the Duxbury EOC, High-range DRDs will be issued to emergency workers on lifesaving missions.

- PPE as directed and supplied by Duxbury Emergency Management Director.

b. The DLR is not direct reading, but is more accurate than the DRD's, and provides a permanent exposure record for the individual emergency worker. PNPS has contracted to process DLR's during an emergency on a 24-hour basis.

c. The DRD provides the wearer with a visual indication of the cumulative dose received for the mission. The DRD is direct-reading, allowing the emergency worker to check the total dose received at any time. The DRD documented

readings provide the permanent record (official dose) in the event an individual's DLR is lost or damaged.

d. The radiological dosimeter charger (CDV-750) is used to charge or "REZERO" the DRDs. The chargers will be kept at the dosimetry issuing points. Agency Dosimetry Coordinators are responsible for zeroing DRD's.

e. Calibrated survey meters contained in predistributed monitoring and decontamination kits are used to determine the presence of contamination. The CDV-700 survey meter is used to locate and quantify external radioactive contamination on personnel or equipment, to detect potential internal thyroid contamination, and to measure dose rates in low intensity radiation fields.

f. Supply and maintenance of radiation monitoring and personnel dosimetry equipment is discussed in Part H of this plan.

3. Reading, Reporting and Recordkeeping

a. Emergency workers report their doses at 100 mRem and 175mRem on their low-range dosimeter and in 1R increments on their mid-range dosimeter to their Dosimetry Coordinator who in turn reports to the Town Radiological Officer. These readings are forwarded to all levels of the Radiological Exposure Control Organization (Figure K-1). Also, since there is a need to ensure that certain actions conveying information are put into writing, each level of the organization that provides any monitoring or decontamination ensures that these efforts are documented.

b. Individuals are instructed to read their direct-reading dosimetry devices at least every 15 minutes unless otherwise directed by MEMA Region II Radiological Officer.

c. The exposure received from each mission is entered on the Emergency Worker Exposure Form and the cumulative exposure maintained. The Emergency Worker Exposure Form is kept with the emergency worker for the duration of the emergency and contains information and instructions on recording exposure readings, PAG limits, and use of KI.

d. The Dosimetry Coordinator responsible for issuing dosimetry keeps a log of equipment issued, and continually tracks the accumulated emergency worker dose. The dosimetry logs are updated when doses are reported to the Dosimetry Coordinator.

e. Records are kept of personnel and equipment monitored, and any decontamination efforts that occur.

f. After the emergency has ended, copies of completed dose records, equipment log sheets, personnel and equipment monitoring and any decontamination efforts are forwarded from the originators through the organization until copies of all documents are received by the Massachusetts Department of Public Health (MDPH).

4. Whole Body Exposure Limits

a. Emergency Response Procedures are designed to prevent or minimize exposure for emergency workers. Actions include methods such as rotation of tasks to minimize worker exposures by carefully monitoring individual exposure

accumulations. Also, non-radiologically related tasks (e.g., data recording, communications) are performed outside of radiation areas, whenever possible.

b. MDPH permission must be obtained before exceeding 175mRem.

c. When the need arises to allow an individual on a volunteer basis for a life-saving activity, the emergency worker's Dosimetry Coordinator (or other responsible supervisor) will inform the Radiological Officer in the MEMA Region II EOC. The MEMA Region II Radiological Officer will relay the request to MDPH. If MDPH agrees that the exposure is warranted, the individual may be allowed to receive a voluntary exposure for a lifesaving activity.

d. The town's Radiological Officer will verify the circumstances and inform the MEMA Region II Radiological Officer of the situation and any implementation that is being carried out. Follow-up information will be provided to the MEMA Region II Radiological Officer who will relay such information to the Massachusetts Department of Public Health at the MEMA SEOC.

5. Thyroid Exposure Limits

a. If the thyroid dose to emergency workers is projected to exceed the precautionary measures recommended by MDPH, emergency workers who may be exposed are instructed to take potassium iodide (KI). This decision is made to allow sufficient time for maximum effectiveness of KI.

b. Potassium Iodide, the most commonly used thyroid blocking agent, saturates the thyroid with non-radioactive iodine to block uptake of radioactive iodine. KI is stored in the town for distribution to emergency workers. The MEMA supplies a sufficient complement of KI tablets in each town to allow for distribution to emergency workers promptly upon the recommendation from

the MDPH commissioner or designee. Each blister pack of KI tablets, placed in the town dosimetry kits, is checked quarterly and carries a warning concerning the side effects associated with the use of KI. Emergency workers who use dosimetry are advised of the side effects of KI in training courses and receive an instruction sheet with KI at the time of distribution.

c. Potassium iodide is stored in all public schools for distribution to school staff and students during school hours upon the direction of the Emergency Management Director. KI is also stored in the public schools for distribution when the schools are utilized as emergency shelters. Additional supplies of KI are stored at the Central Fire Station for the remaining Town shelters. Potassium iodide supplies are inventoried quarterly. Personnel who might be required to distribute KI have information stating manufacturer's recommendation for its use, and its potential side effects.

6. Contamination Monitoring and Decontamination

a. All emergency workers are monitored for contamination. All vehicles and equipment potentially contaminated shall be monitored. Monitoring is performed at the Regional Emergency Worker Monitoring and Decontamination Station (REWMDS) located at the Erwin K. Washburn Primary School, Carver, MA.

b. Personnel designated to perform emergency worker contamination monitoring and decontamination are provided with contamination monitoring instruments, as well as decontamination and radioactive material control supplies and necessary documentation forms. These items are maintained in kits

specifically designed to support their function, along with the specific instructions for the care and use of the equipment. The kits are kept at the Regional Emergency Worker Monitoring and Decontamination Station (REWMDS).

c. The REWMDS facility is equipped to decontaminate individuals, vehicles and equipment found to have contamination levels greater than 100 cpm above background. Any person reading greater than 100 cpm above background on a thyroid screen will be referred to hospitals for evaluation.

d. Personnel performing monitoring and decontamination activities will segregate, contain and identify (through radiological signs and barriers), contaminated items. These activities are monitored by MDPH personnel. The collection and handling of radioactive waste from decontamination is coordinated by MDPH and provided by PNPS who will ensure proper disposal at the end of the emergency.

e. The training course given to emergency workers providing radiological monitoring and decontamination includes sections on personnel, vehicle and equipment monitoring and decontamination methods.

7. Medical Support and Treatment Facility

a. Designated hospitals (see Section L.2) will decontaminate the following:

(1) Mobility impaired transported by ambulance or other special vehicle

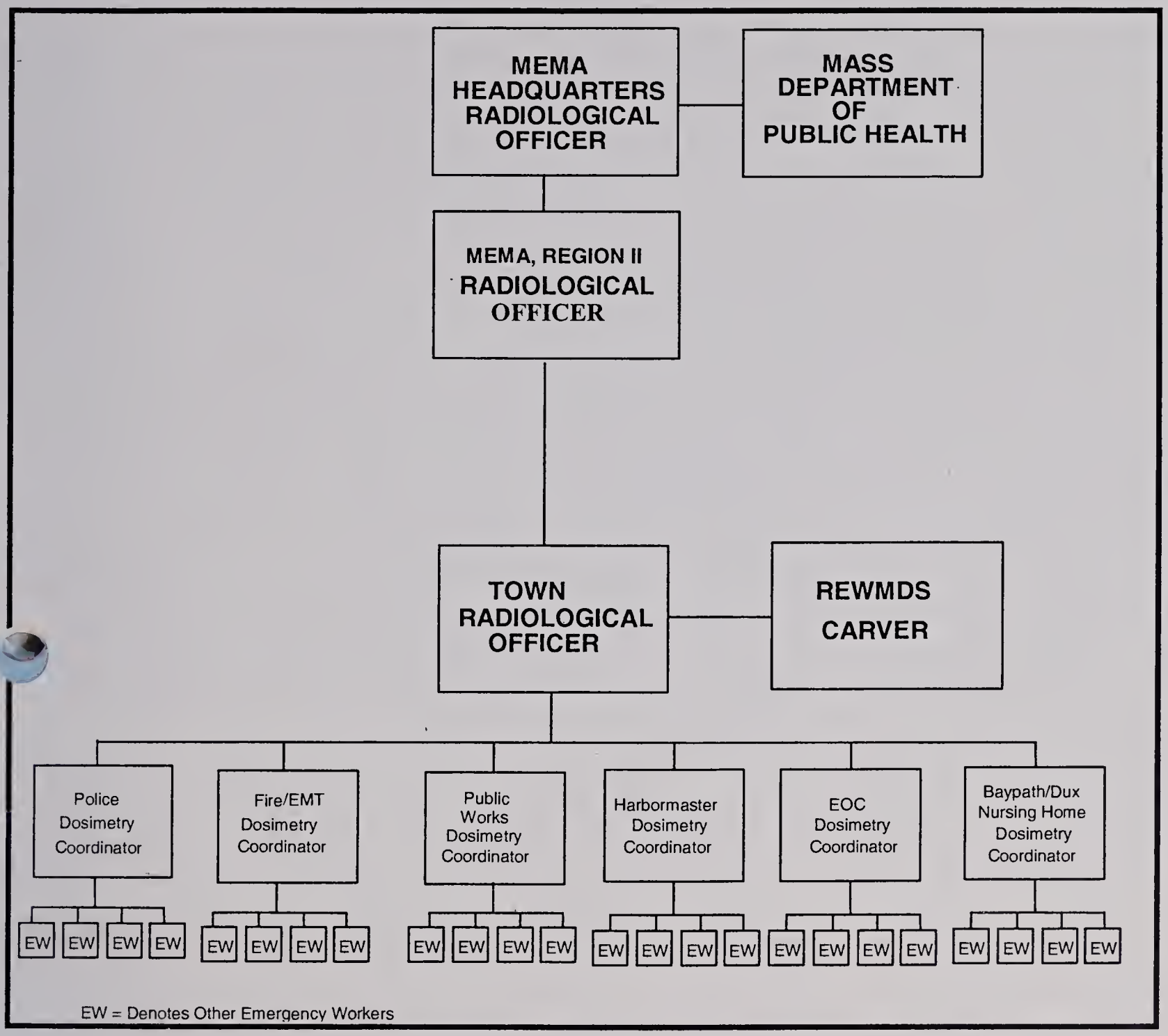
(2) Persons with open wounds

(3) Persons who cannot be decontaminated below 100 cpm above background in two attempts.

b. All persons reading greater than 100 cpm above background thyroid will be sent to designated hospitals for evaluation and treatment of radioactive iodine uptake.

Figure K-1

RADIOLOGICAL EXPOSURE CONTROL ORGANIZATION



SECTION II - FUNCTIONS

PART L - MEDICAL AND PUBLIC HEALTH SUPPORT

1. Purpose

This section describes the medical services available for treating contaminated injured individuals. The term "contaminated injured" means: 1) contaminated and otherwise physically injured; 2) contaminated and exposed to dangerous levels of radiation; or 3) exposed to dangerous levels of radiation.

2. Hospitals

Several Medical Support (MS-1) hospitals are contracted to serve as primary medical facilities to receive and treat contaminated injured individuals from the general public. The MS-1 hospitals to the PNPS emergency planning zone are:

Medical Facility	Location
Good Samaritan	Brockton, MA
Quincy Medical Center	Quincy, MA

The hospitals are equipped, staffed, and trained to provide medical expertise and to furnish medical assistance at their facilities to contaminated injured patients. Agreements are listed in the MEMA Region II Plan.

3. Evaluation of Radiation Exposure

The above hospitals are capable of providing diagnostic evaluation services for individuals with an uptake of radioactive materials. The hospitals may also seek assistance from the U.S. Department of Energy, Radiological Assistance Medical Team, in the performance of these services. The request for this assistance shall be made by the MDPH in conjunction with MEMA.

4. Training

Training for personnel at medical facilities and ambulance services will be provided by MDPH and/or MEMA. This training is described in Section II, Part O.

5. Transportation of Contaminated Injured Individuals

Contaminated injured patients will be transported to the above-mentioned hospitals by ambulances and crews dispatched through the Duxbury Fire Department. Emergency Medical Services (EMS) providers will receive training in the handling of contaminated injured persons to supplement their current knowledge (see Section II, Part O).

Following the transfer of the patient, each EMT attendant will be monitored and decontaminated, if necessary. The ambulance vehicle and equipment will also be monitored for contamination and, if contaminated, will be held for decontamination.

a. Life threatening injuries to a contaminated injured person will necessitate an Advanced Life Support (ALS) vehicle, if available.

b. Non-life threatening injuries to a contaminated injured person will be provided Basic Life Support (BLS) services.

c. If a "State of Emergency" has been declared the Massachusetts National Guard personnel may assist with normal transportation duties.

6. Drills and Exercise

Contaminated injured drills and exercises are described in Section II, Part N.

SECTION II - FUNCTIONS

PART M - RELOCATION, RE-ENTRY AND RETURN PLANNING AND POST-ACCIDENT OPERATIONS

1. Purpose

This part identifies general plans for relocation, re-entry, and return following a release of radioactive material from Pilgrim Nuclear Power Station (PNPS) which results in evacuation or sheltering of an affected area.

2. Criteria for Relocation, Re-entry and Return

The Duxbury Board of Selectmen will be informed by the Massachusetts Emergency Management Agency (MEMA), on recommendation from the Massachusetts Department of Public Health (MDPH) of the termination of the emergency measures by the governor.

The Town of Duxbury emergency response effort will shift from an emergency phase to a recovery phase only after the following conditions are met:

a. The State informs the Board of Selectmen that releases of radioactive material from the power station to the environment are under control or have ceased;

the plant is in a stable condition, and there is no potential for further uncontrolled releases of radioactive material.

b. State field monitoring teams verify that releases have ceased.

c. Contaminated areas in the Town of Duxbury have been identified and adequately marked to prevent inadvertent entry.

d. The State makes the recommendation to relax protective measures in accordance with the Massachusetts Radiological Emergency Response Plan.

e. Recovery operations may include:

(1) Relocation of Population from restricted zone(s).

(2) Radiological assessment of food and water.

(3) Decontamination activities.

(4) Disposal of radioactive waste.

(5) Transportation assistance to evacuees.

(6) Restoration of Town-provided services.

(7) Control of access to restricted zones.

(8) Security within restricted zones.

(9) Establishment of a long-term radiological monitoring program.

(10) Medical follow-up for residents and emergency workers who may have been exposed to radiation.

f. Town, State, Federal, and Utility resources will be available to support relocation operations. MEMA will advise the Duxbury Board of Selectmen on available sources of State, Federal and Utility financial assistance for disaster relocation, and will assist in applying for such assistance, if needed.

3. Town Response Actions

The Town of Duxbury will establish a Recovery Group which will develop a plan of action for the recovery phase of the emergency. The Group will be composed of the following key EOC staff:

a. Selectmen
b. Public Information Officer
c. Emergency Management Director
d. Police Chief
e. Fire Chief
f. DPW Director
g. Radiological Officer
h. Transportation Officer
i. Special Facilities Coordinator
j. Harbormaster

4. Relocation

The Recovery Group will, when advised by MDPH and MEMA that an area(s) of the town has been identified as a restricted zone (exceeds the relocation PAGs) will identify facilities outside of the restricted zone to relocate the restricted zone population that had not been previously evacuated. If no such facilities exist the committee will request, through MEMA, assistance from State and Federal Agencies to accomplish relocation.

5. Re-Entry

Depending on radiation levels, emergency workers and residents may be permitted limited access to restricted zones for essential duties, such as care of livestock, based upon analysis of the situation by MDPH. All decisions to permit re-entry will be coordinated among MDPH, MEMA and the Board of Selectmen.

6. Return

a. The Public will be allowed to return to those areas that have been cleared for unrestricted residence or used by previously evacuated populations after confirmation by monitoring teams. Before announcements are made to the public concerning return activities, MEMA shall inform the Selectmen

(through local Emergency Management Agency). This will ensure that any needed local support such as traffic control is available and/or in place and that resumption of town services can occur in an orderly fashion.

b. The public will be informed as MDPH opens areas for re-occupation and of any advisories in place through the Joint Information Center or, if the Joint Information Center is not operational, through MEMA.

c. MDPH is responsible for periodically estimating total population exposure.

7. More detailed information on relocation, re-entry and return activities is contained in the Massachusetts Comprehensive Emergency Management Plan, Appendix 2, Section ii and the Town of Duxbury standard operating procedures.

SECTION II - FUNCTIONS

PART N - EXERCISES AND DRILLS

1. Purpose

This section describes the exercises and drills which will be conducted to evaluate emergency preparedness in the Town of Duxbury.

2. Criteria

a. An exercise will be conducted on a biennial basis in conjunction with PNPS and the Commonwealth of Massachusetts. This exercise will include Town and State agencies in order to assess their resources and capability to respond to a radiological emergency. A scenario will be developed and the actual physical performance of Town and State agencies will be demonstrated.

b. Prior to the biennial exercise, PNPS, Town, and State officials will jointly develop a scenario. Scenarios used in exercises will be drafted in such a manner as to reflect a realistic series of events which may serve to develop, or evaluate, the professional response capabilities of the agencies under evaluation. Scenarios should include the following major criteria in order to achieve all exercise goals and objectives:

(1) The exercise objectives and evaluation criteria.

(2) Dates, times, sites, participating organizations, and extent of play for scheduled activity.

(3) The simulated events in chronological order.

(4) A timetable of real and simulated initiating events.

(5) Appropriate simulated radiological offsite releases which initiate Town response actions.

(6) A chronological narrative summary describing the conduct of the exercise.

(7) An observation and critique schedule.

c. The major scenario will be varied from exercise to exercise so that all major elements of the plan and preparedness organizations are tested within a six (6) year period.

d. An exercise starting between 6:00 p.m. and 4:00 a.m. and an ingestion exposure EPZ exercise may be conducted once every six (6) years.

e. Exercises should be conducted under various weather conditions and during different seasons of the year.

f. At least one exercise over a period of six (6) years may be unannounced.

g. Coordination of the exercise date with the NRC and FEMA will be arranged so that evaluation teams can be present and participation by Federal response agencies is possible. This includes providing advance supporting materials, where appropriate.

h. Additional exercises or drills may be conducted by any agency having a response role. This exercise or drill may be prepared by the State in coordination with Town officials and may involve one or more agencies which will strive to improve operations through the exercise process. These exercises may be operational exercises or table top exercises.

3. Communications Drills

a. A communications test of the DNN system and associated telecopier devices will be conducted monthly. The tests will be initiated by PNPS in coordination with MEMA and the Towns. Satisfactory acknowledgement of test message content and quality will serve as acceptance criteria.

b. A communications test of BECONS radio will be conducted at least monthly. This test will be initiated by PNPS in coordination with the State and towns. Satisfactory acknowledgement of test message content and quality will serve as acceptance criteria.

c. Communications between the Town of Duxbury EOC and other Town emergency response organization EOC's inside the 10-mile EPZ will be conducted annually.

d. Communications between the Town of Duxbury EOC and emergency response organizations outside the 10-mile EPZ will be tested quarterly.

e. Radio communications between the Town of Duxbury EOC and the Massachusetts Emergency Management Agency (MEMA) Region II Office will be tested monthly.

4. Medical Emergency Drill

A medical emergency drill with a simulated radiologically contaminated individual involving ambulance services and hospitals supporting the emergency response will be conducted annually.

5. Evaluation

a. A critique by appropriate Town, State, and Federal evaluators will be held as soon as possible after an exercise or drill.

b. MEMA will ensure that all emergency plan and procedure deficiencies identified by participants or evaluators during drills and exercises are corrected. MEMA will assist the participants with any revisions necessary to improve response. Problems identified by Federal agencies will be addressed to MEMA through the FEMA Region I Regional Assistance Committee Chairman. It is the responsibility of MEMA to respond to such correspondence.

SECTION II - FUNCTIONS

PART O - RADIOLOGICAL EMERGENCY RESPONSE TRAINING

1. Purpose

This part describes the training to be provided to emergency response personnel in the Town of Duxbury who may be called upon to respond to an emergency at the Pilgrim Nuclear Power Station (PNPS).

2. Scope of Training

The Emergency Preparedness Training Program is divided into four basic phases: Introductory Training, Protective Response Training, Practical Drills, and Retraining. Individual members of the emergency response organization are offered training in each phase of the program based upon their assigned position and emergency tasks. (see Figure O-1). Training or retraining is offered to emergency response personnel on an annual basis.

a. Introductory Training

Introductory training provides fundamental skills and/or knowledge needed by all emergency response personnel. All personnel should complete Introductory Training prior to attending Protective Response Training.

Introductory training consists of the following:

- Radiological Emergency Awareness and Response
- Standard Operating Procedure Training
- Dosimetry (required personnel)
- DNN & BECONS (required personnel)
- Survey Meters (required personnel)
- Portal Monitors (required personnel)

b. Protective Response Training

Protective Response Training is comprised of lessons designed to provide specific skills and knowledge needed by agency personnel to accomplish their assigned tasks within the organization. This training usually consists of classroom, practical, and standard operating procedure training and walkthroughs.

Individuals may not be required to complete all lessons contained within the Protective Response Training modules. MEMA/NPD Annual Training Requirements (Attachment #1) indicate the requirements for completion of lessons within a module based upon the individual's position within the agency or response organization. Generally, emergency response personnel complete Protective Response Training prior to participating in Practical Drills.

Standard Operating Procedure Training consists of a review of the emergency response team member's specific Standard Operating Procedure (SOP). Training is designed to familiarize personnel with the format and design of the SOP, as well as ensure the understanding of its content and how to use it to accomplish the assigned task within the organization.

The Protective Response Support Lessons provide specific skills and knowledge common to various agencies within the organization. These lessons generally include "hands on" familiarization with standard operating procedures and facilities and equipment used for emergency response. Lessons included in this module are:

(1) Dosimetry and Exposure Control

(2) Survey Meter Operation

(3) Siren Activation

(4) BECONS and DNN (Dedicated Notification Network)

(5) Teletypewriter for the Hearing Impaired

(6) Introduction to EOC

c. Practical Drills

Practical drills are comprised of group walkthroughs designed to enhance the emergency response organization's overall functioning as an integrated team. Practical drills may include:

(1) Documentation Unit

(2) Public Information

(3) Special Needs

(4) Traffic and Access Control

(5) EOC Staff

d. Retraining

General refresher training is provided to experienced emergency response members and is comprised of lessons and drills designed to ensure qualifications are maintained at a high level of readiness

Additionally, items that may be included in retraining are overall integrated operation and responsibilities, changes to the emergency plan or procedures, and topics required by regulatory agencies.

(1) Radiological Emergency Awareness

Additionally, items that may be included in retraining are overall integrated operation and responsibilities, changes to the emergency plan or procedures, and topics required by regulatory agencies.

3. Training Requirements

Training is provided to emergency personnel who will be called upon to respond to an emergency. Figure 0-1 provides a matrix of emergency personnel and recommended training modules. Specific lessons within a module are specified in the training procedure.

4. Frequency of Training

Introductory training will be scheduled expeditiously for all newly assigned emergency personnel.

a. All requests from Town agencies for training conducted by State or Federal agencies will be submitted through or coordinated with the Duxbury Emergency Management Agency.

b. All Town Training will be coordinated by the Duxbury Emergency Management Agency.

c. The Town Emergency Management Agency will maintain a listing of trained personnel and individual emergency assignments, and will on an annual basis assure the training of new personnel or retraining of existing personnel, as required.

d. The Town Emergency Management Agency will coordinate training efforts, including course scheduling with the appropriate agency being trained. The Emergency Management Director will schedule MEMA approved trainers, or arrange for resources through MEMA from the utility, other towns, or the Commonwealth.

5. Training Program Review and Evaluation

The Emergency Preparedness Training Program will be reviewed and evaluated on an annual basis to ensure consistency with the emergency plan and standard operating procedures, and conformance to regulatory requirements. Consideration will be given to performance evaluations, training requests, and training session evaluation sheets.

FIGURE O-1 (Page 1 of 2)

EMERGENCY RESPONSE PERSONNEL TRAINING MATRIX

Duxbury Emergency Response Personnel Training Matrix

	Position	Protective Response Modules																	
		Intro	Spprt	EOC	SIMn	CD	Plce	Fire	DPW	Schl	Hlth	SpNd	Trans	PI	Rad	Shlt	MsCl	Com	Prac	Maint
	Board of Selectmen	X	X	X	X														X	
	Emerg. Management Director	X	X	X		X													X	X
	Police Dept Officer	X	X	X			X												X	
E	Fire Dept Officer	X	X	X				X											X	
O	DPW Officer	X	X	X					X										X	
C	School Dept Officer	X	X	X						X									X	
	Bd of Health Officer of	X	X	X							X								X	
	Special Needs Officer	X	X	X								X							X	
	Special Needs Staff	X	X	X								X							X	
S	Transportation Officer	X	X	X									X						X	
T	Public Information Officer	X	X	X										X					X	
A																				
F	Rumor Control Officer	X	X	X										X					X	
F	Radiological Officer	X	X	X											X				X	
	Shelter Officer	X	X	X												X			X	
	Message Control Clerk	X	X	X													X		X	
	Messager Runner	X	X	X													X		X	
	Status Board Keeper	X	X	X													X		X	
	Communications Officer	X	X	X														X	X	
	Police Radio Operator	X	X	X			X											X	X	
	Fire Radio Operator	X	X	X				X										X	X	
	DPW Radio Operator	X	X	X					X									X	X	
	RACES Radio Operator	X	X	X														X	X	

FIGURE 0-1 (Page 2 of 2)

EMERGENCY RESPONSE PERSONNEL TRAINING MATRIX

Duxbury Emergency Response Personnel Training Matrix

Position	Protective Response Modules																
	Intro	Spprt	Plce	Fire	DPW	Ewmd	EMS	Schl	DyC	Camp	N Hm	Rec A	Tran	Tow	Shltr	Hrbr	
Police Department	X	X	X													X	
Fire Department	X	X		X			X										
Dept of Public Works	X	X			X												
FIELD PERSONNEL: School Dept Staff	X							X									
School Dept Bus Drivers	X	X						X					X				
Day Care Staff	X								X								X
Camp Staff	X									X							
Nursing Home Staff	X	X									X						
TSA Staff	X	X											X				
Tow Truck Provider Staff	X	X												X			
Shelter Staff	X														X		
Harbormaster	X	X														X	

SECTION II - FUNCTIONS

PART P - Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans

1. Purpose

This part establishes the responsibilities for plan development, review and distribution, and describes the training for emergency planners.

2. Responsibilities

a. Emergency Management Director

The Duxbury Emergency Management Director (EMD), with direction from the Board of Selectmen, has primary responsibility for developing and maintaining the plan, **standard operating** procedures, and training elements of the emergency planning program.

b. Other Town Agencies

Other response agencies for the Town of Duxbury are responsible for providing necessary procedural or staffing changes to the EMD, maintaining the department's copy of the plan and participating, as required, in periodic tests, drills and exercises at both the Town and State levels.

3. Plan Update and Distribution

a. The Duxbury EMD will update the plan, as needed, and review and certify the plan to be current at least annually. The update will take into account necessary changes identified by drills and exercises. The Duxbury response agencies will communicate in writing on a regular basis to the Duxbury EMD any changes in personnel, telephone numbers, or other pertinent data which affect their responsibilities within the plan. This will be done in conjunction with the Massachusetts Emergency Management Agency (MEMA) Region II and Pilgrim Nuclear Power Station (PNPS) emergency plans. Exercises and tests of various elements of the Town plan will be carried out on a regular basis and in conjunction with MEMA Region II.

b. Proposed changes will be reviewed by affected town agencies and the MEMA/NPD Region II Planner, then submitted to MEMA/NPD Framingham for approval. Approved revised pages will be dated and clearly marked to indicate where changes have been made, and furnished to controlled document holders based upon the distribution list maintained by MEMA Document Control. In the event there is no change during the annual review, a letter certifying the plan is current will be furnished to MEMA/NPD Framingham.

c. Each response agency will update telephone numbers used in **standard operating** procedures at least quarterly.

4. Annual Letter of Certification

The Town will submit information to MEMA for the Annual Letter of Certification, which will include the yearly completion status of the following radiological emergency response program elements:

a. Programs conducted to increase public and media response awareness.

b. Checks and tests of emergency equipment.

c. Drills and exercises held.

d. Training conducted.

e. Update of the plan and letters of agreement.

f. Testing of the Prompt Notification System for the public.

5. Training of Emergency Planners

Training of the Duxbury EMD and other Town personnel responsible for the planning effort will be in accordance with MEMA and FEMA training requirements for radiological emergency response planning. Funding and enrollment assistance are available through MEMA to help Town emergency planners attend FEMA courses designed to train them in radiological planning. Examples of FEMA courses available to planning personnel are:

a. G320 Fundamentals Course for Radiological Response

This 3-day performance-based (hands-on) course for assigned local radiological response team members covers the concepts of radiation protection, radiation detection instruments, radiological monitoring techniques, radiological hazards and

protective actions, team-building, and basic procedures to support planning/response for emergency and recovery activities in the event of a radiological incident. This course is designed so that modules may be conducted separately and adapted to specific audience needs and requirements.

b. Radiological Emergency Preparedness Planning

This course focuses on nuclear power plant off-site emergency preparedness. It addresses Federal regulatory policies, development and testing of plans, and public perceptions. This course provides a sound understanding of basic planning assumptions and policy issues.

c. IS-3 Radiological Emergency Management

This Independent Study course contains information on a variety of radiological topics, including:

- Fundamental principles of radiation
- Nuclear threat and protective measures
- Nuclear power plants
- Radiological transportation accidents
- Other radiological hazards

d. IS-301 Radiological Emergency Response

The goal of this Independent Study course is to provide a learning experience in which participants demonstrate a comprehensive understanding of radiological protection and response principles,

guidelines, and regulations that will prepare them for the S301, Radiological Emergency Response Operations (RERO) course.

Additional training courses are available to emergency responders through the following sources:

- EMI Catalog of Activities
- MEMA Website: www.state.ma.us/mema
- FEMA Website: www.fema.gov

6. Supporting Documents to the Plan

The Town plan is part of an overall effort to provide for proper response to an emergency at PNPS. Other emergency plans are coordinated with and support the Town plan. In addition, several studies and reports have provided a planning basis for development of the plan. These related and supporting documents are listed in Figure P-1.

Figure P-1

Supporting Documents List

1. Braintree Receiption Center Radiological Emergency Response Plan
2. Commonwealth of Massachusetts Radiological Emergency Response Plan - MEMA Region II
3. Commonwealth of Massachusetts Radiological Emergency Response Plan
4. Federal Radiological Emergency Response Plan
5. Pilgrim Nuclear Power Station Emergency Plan
6. Pilgrim Station Evacuation Time Estimates and Traffic Management Plan
7. Shelter Implementation Program-Duxbury
8. Public Alert and Notification System for Pilgrim Nuclear Power Station

SECTION III - LETTERS OF AGREEMENT

1. All other Letters of Agreement are under separate cover (i.e. negotiated between the State and outside third parties.

2. Town facilities used for emergency purposes do not require a Letter of Agreement.

SECTION IV - NUREG-0654 CRITERIA/PLAN CROSS REFERENCE

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)			PLAN SECTION	PLAN PART	PLAN PARAGRAPH
A.	ASSIGNMENT OF RESPONSIBILITY				
1.	a.	Identify all response organizations in Emergency Planning Zone	II	A	4
	b.	Specify organization and sub-organization concepts of operation	I II	E A	 4
	c.	Interrelationships of organizations (block diagram)	II II	A A	Fig. A-1 Fig. A-2
	d.	Identify the individual in charge of emergency response by title	I II II	E A A	1 2b 3
	e.	Provide 24-hour manning of communication links	II II II	A H E	4 2c 2b
2.	a.	Specify organization functions, responsibilities, and key individuals by title. (matrix chart)	II II	A A	4 Fig. A-3
	b.	Legal basis for authority	II	A	2b
3.		Written agreements and legal instruments	II III	A	2e
4.		Responsible official for 24-hour operations and for protracted period.	II II	A H	4 2c
B.	ONSITE EMERGENCY ORGANIZATION		Addressed in PNPS Plan		

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)	PLAN SECTION	PART	PARAGRAPH
C. EMERGENCY RESPONSE SUPPORT AND RESOURCES			
1. Resources to support Federal Response.	II	C	2
2. Representation at EOF	II	C	4
3. Organization, facilities and individuals that can be used in an emergency	II II II III	A C L	4b-e 3b 2,3
D. EMERGENCY CLASSIFICATION SYSTEM			
1. Emergency classification and emergency action levels scheme established	II II	D D	2 Fig. D-1
2. Procedures on emergency action recommendations	II	D	3
E. NOTIFICATION METHODS AND PROCEDURES			
1. Procedures for notification of response organizations to include means for verification of messages	II II II	E E D	2,4 Fig. E-1 Fig. D-1
2. Procedures for notifying, alerting, and mobilizing emergency personnel	II II	E E	2c-e Fig. E-2A,B,C
3. Dissemination of information to the public including EAS Stations	II II II	E E E	5,6 Fig. E-3 ig. E-6
4. Administrative and physical means for notifying and providing prompt instructions to the public in EPZ	II II II II II	E E E A J	2a 5,6 Fig. E-3 4a 2c
5. Written messages to the public for protective action instructions	II II II II	E E D E	5a Fig. E-4 Fig. D-1 Fig. E-5

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)	PLAN SECTION	PART	PARAGRAPH
F. EMERGENCY COMMUNICATIONS			
1. a. 24-hour capability for notification, activation, and communication for emergency response network	II II II	E E F	2a,b Fig. E-1 4
b. Communications with contiguous governments within EPZ's	II II	F F	6,8 Fig. F-1
c. Communications with Federal response organizations	II II	F F	5 Fig. F-1
d. Communications between PNPS to near-site Emergency Operations, Facility, State, and town EOC's and radiological monitoring teams	II II	F F	8,12 Fig. F-1
e. Alerting and activating emergency response organization	II II	E E	2c-e Fig. E-2
2. Fixed and mobile medical support facilities communication links	II II	F F L	10 Fig. F-1 2
3. Periodic emergency communications system testing	II	N	3
G. PUBLIC EDUCATION AND INFORMATION			
1. Periodic dissemination of emergency information to the public	II	G	6
2. Public Information Program for permanent and transient population in EPZ	II	G	6b
3. a. Points of contact and physical locations designated for use by news media during emergency	II II	G G	2f 3a,b

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)	PLAN SECTION	PART	PARAGRAPH
G. PUBLIC EDUCATION AND INFORMATION (Con't.)			
4. a. Designation of spokesperson	II II	A G	4a(13) 2c
b. Arrangements of exchange of information between spokes-perons	II II	A G	4a(2) 2e
c. Rumor Control	II II	G H	4 2c(4)
5. Annual media orientation on emergency plans, radiation information, and emergency public information release points	II	G	5
H. EMERGENCY FACILITIES AND EQUIPMENT			
1. Establishment of an EOC	II	H	2a
2. Activation and staffing of EOC and other emergency facilities	II II II	H G D	2b,c 3b Fig. D-1
3. Radiological monitoring equipment	II	H	3
4. Periodic radiological equipment calibration inventory and inspection	II II	A H	4a(3) 3a
5. Emergency kit identification	II	H	3-5
6. Central point for receipt and analysis of field monitoring data	II II	H I	6 2
I. ACCIDENT ASSESSMENT			
1. Capability and resources for EPZ field monitoring	II	I	2
2. Assessment of radiological hazards	II	I	2

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)	PLAN SECTION	PART	PARAGRAPH
J. PROTECTIVE RESPONSES			
1. Evacuation routes for PNPS personnel to offsite reassembly area(s)	II	J	6a
2. Implement protective measures capability based on PAG's and other criteria	II	J	2a
3. a. Maps showing the following:			
Evacuation routes	II	J	Fig. J-3
EPZ subareas	II	J	Fig. J-2
Sampling & monitoring points	II	J	Fig. J-1
Reception centers	II	J	Fig. J-8
Shelter Areas	II	J	Fig. J-2
b. Population distribution in EPZ by evacuation subareas	II	J	Fig. J-4 J-5 J-6
c. Means for notification of transient and resident populations	II	E	5,6 Fig. J-9
d. Protection of mobility impaired	II II	J J	4b 4e
e. Radioprotective drugs use, quantities, storage, and distribution means	II II	K J	5 3e
f. State Health Department decisions on radioprotective drugs distribution to the populatin and to emergency workers	II II	J K	3e 5a
g. Means of relocation	II II	J J	3b 4
h. Reception Centers in host areas outside 10-mile EPZ area	II II	J J	3b 4e

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)	PLAN SECTION	PART	PARAGRAPH
J. PROTECTIVE RESPONSES (Con't.)			
i. Projected traffic capacities of evacuation routes during emergencies	II	J	5
j. Responsibility for and control of access to evacuated areas identified	II	J	3c
k. Identification of and means for dealing with potential impediments to use evacuation routes and contingencies	II	J	7,10
l. Evacuation time estimates for EPZ evacuation subareas	II II	J J	9 Fig. J-7
4. Means for monitoring evacuees within 12-hour period after arrival at Reception Centers and registration.	II	J	12a,b
K. RADIOLOGICAL EXPOSURE CONTROL			
1. a. 24-hour capability for determining emergency worker doses and provisions for distribution of dosimeters	II	K	2,3
b. Maintaining emergency worker dose records and dosimetry use instructions	II	K	3 Fig. K-2
2. Decision chain for exceeding protective action guides for emergency workers	II	K	4 Fig. K-1 Fig. K-2
3. a. Action levels for need to start decontamination	II	K	6c Fig. K-3
b. Means for decontamination of wounds, supplies, equipment, and waste disposal	II	K	6,7

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)	PLAN SECTION	PART	PARAGRAPH
L. MEDICAL AND PUBLIC HEALTH SUPPORT			
1. Identify primary and backup hospitals for medical evaluation of radition exposure and uptake	II	L	2-4
2. Transport of contaminated injured victims to medical facility	II	L	5
M. RELOCATION, REENTRY, AND RETURN PLANNING AND POST-ACCIDENT OPERATION			
1. Procedures for relocation, reentry, and return and relaxing of protective measures	II	M	2-4
N. EXERCISE AND DRILLS			
1. a. Exercises	II	N	2a
b. Mobilization of resources under varying scenarios	II	N	2,5
2. a. Communication drills	II	N	3
c. Medical emergency drills	II	N	4
d. Radiological monitoring drills	Addressed in State Plan		
3. a. Drill objectives	II	N	2b(1)
b. Date, time, place, and participating organizations	II	N	2b(2)
c. Simulated events	II	N	2b(3)
d. Time schedule of events	II	N	2b(4)
e. Narrative summary	II	N	2b(6)
f. Arrangements for materials to observers	II	N	2g
4. Exercise evaluation and critiques	II	N	5
5. Implementing corrective action	II II	N P	5 3a

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)	PLAN SECTION	PART	PARAGRAPH
O. RADIOLOGICAL EMERGENCY RESPONSE TRAINING			
1. Individual training	II	O	2
	II	O	Fig. O-1
b. Off-site response agency participants	II	O	3
2. Training program established for:			
a. Directors or coordinators of response organizations	II	O	2b
b. Accident assessment	Addressed in State Plan		
c. Monitoring teams and analysis personnel	Addressed in State Plan		
d. Police, security, and fire fighting personnel	II	O	2b
f. First aid and rescue personnel	II	O	2b
g. Support services personnel	II	O	2b
h. Medical support personnel	II	O	2b
j. Emergency communications personnel	II	O	2b
3. Provisions for initial/retraining of emergency response personnel	II	O	3
	II	O	2d
	II	O	4
P. RESPONSIBILITY FOR PLANNING EFFORT			
1. Emergency Planner training	II	P	5
2. Title of person with responsibility for emergency planning	II	P	2a
3. Emergency Management Director	II	P	2a
	II	P	3a
4. Updating of Town Plan and agreements	II	P	3a
	II	P	4

PLANNING CRITERIA (NUREG-0654/FEMA-REP-1)	PLAN SECTION	PART	PARAGRAPH
P. RESPONSIBILITY FOR PLANNING EFFORT (Con't.)			
5. Plan and procedure update dissemination	II	P	3b
6. Supporting documents listing	II II	P P	6 Fig. P-1
7. Standard Operating Procedures listing in plan and implementation reference for Plan sections	V		
8. Table of Contents and NUREG-0654 Cross Reference	Table of Contents IV		
10. Periodic Updating of emergency telephone numbers in procedures	II	P	3c

SECTION V – STANDARD OPERATING PROCEDURE LISTING

A. Response Agency/Individual

SOP No.	Procedure Title	Part of Plan Implemented
DUX-01	Board of Selectmen	J,M
DUX-02	Emergency Management Agency	C,F,H,J
DUX-03	Police Department	E,J
DUX-04	Fire Department	E,J,K,L
DUX-05	Department of Public Works	J
DUX-06	School Department	J
DUX-07	Special Facilities Coordinator	J
DUX-08	Radiological Officer	K
DUX-09	Transportation	J
DUX-10	Shelter Officer	J
DUX-11	Harbormaster	E,J
DUX-12	Special Needs Staff	J
DUX-13	Communications Officer and RACES Communicator	E
DUX-14	PNPS Community Liason	J
DUX-15	Shelter Team	J
DUX-16	Tow Truck Provider	J
DUX-17	Camps	J

B. Functional Activities

SOP No.	Procedure Title	Part of Plan Implemented
DUX-21	Public Information	G
DUX-24	Documentation Unit	H
DUX-25	Siren Activation	E

C. Special Facilities

SOP No.	Procedure Title	Part of Plan Implemented
DUX-30	Berrybrook Preschool	J
DUX-30A	Discovery Corner Preschool	J
DUX-30B	Good Shepherd Christian Academy	J
DUX-30C	Learn In Play Preschool	J
DUX-30D	Pied Piper Preschool	J
DUX-30F	Bay Farm Montessori Academy	
DUX-30G	Magic Dragon Children's Center	J
DUX-30H	Duxbury Bay Maritime School	J
DUX-30I	Pilgrim Day Care	J
DUX-30K	Blue River Montessori School	J
DUX-30L	Elements Montessori School	J
DUX-30M	Pilgrim Area Collaborative	J
DUX-40	Bay Path/Duxbury House Nursing Home	J
DUX-43	Group Facility at North Hill	J
DUX-44	Group Facility at Cordwood Path	J